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REPORT BY THE
Comptroller General
OF THE UNITED STATES

RELEASED

Potential For Excess Funds in DOD

During the 1980's DOD requested budget authority based on inflated estimates of inflation and has been unable to use appropriated funds at the rates estimated when the funds were requested and appropriated. At the start of fiscal year 1985, DOD had authority to obligate \$427.1 billion. Of this amount, \$284.7 billion was fiscal year 1985 authority; the balance was prior year authority and reimbursables. DOD also had unliquidated obligations of \$153.5 billion.

- DOD has budgeted \$36.8 billion more for inflation since FY 1982 than was needed to cover inflation. A special multiplier is used for major weapons that accounts for \$9.2 billion of this amount.
- Unobligated balances and lapses from appropriations are likely to be \$64.9 billion by the end of FY 1985. This is \$13.3 billion more than DOD estimated they would be in the FY 1986 budget.
- Reprogramming actions in FYs 1980-1985 totaled about \$26 billion. Reprogramming actions have provided DOD with flexibility to reapply funds in excess of program needs.

GAO could not determine the precise amount of "unneeded funds" or the amount of the excess that is still available in DOD. A major difficulty is that the accounting system that tracks how funds are actually being used is not directly linked to the budgeting process.

GAO recommendations are meant to ensure that funds are made available in line with what is needed to carry out authorized programs.



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COMPTROLLER GENERAL OF THE UNITED STATES
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B-219975

The Honorable Mark O. Hatfield
Chairman, Committee on Appropriations
United States Senate

The Honorable Alfonse D'Amato
Chairman, Subcommittee on Legislative Branch
Committee on Appropriations
United States Senate

This report responds to your requests dated May 22 and May 28, 1985, that GAO review various aspects of the May 14, 1985, offer by the Secretary of Defense to reapply \$4 billion from fiscal years 1984 and 1985 to the 1986 defense budget. Your requests raised concerns about whether there are excess funds in the Department of Defense (DOD) budget, and you asked that we answer a number of questions about this potential surplus.

In subsequent meetings, we briefed your staff on the \$4 billion offer and provided preliminary information about DOD's unobligated balances, reprogramming actions, and inflation estimates. Your staff requested that we continue our analysis and focus our efforts to identify excess funds and to recommend ways to correct identified problems.

On August 2, 1985, the Chairman of the House Committee on Armed Services asked us to review reprogramming actions and lapsing balances and to suggest alternatives to the current system for compensating for inflation. This report also responds to Chairman Aspin's request.

As arranged with your offices, unless you publicly announce its contents earlier, we plan no further distribution of the report until 2 days from its issue date. At that time, we will send copies to the Chairmen, House Committee on Government Operations, Senate Committee on Governmental Affairs, House Committee on Appropriations, and House and Senate Committee on Armed Services; the Acting Director, Office of Management and Budget; the Secretaries of Defense, Army, Navy, and Air Force; and other interested parties.

A handwritten signature in cursive script that reads "Charles A. Bowsher".

Comptroller General
of the United States

D I G E S T

The defense budget has grown over 100 percent (52 percent in constant dollars) between fiscal years 1980 and 1985. The Senate budget resolution for fiscal year 1986 is the first major reversal to this trend. In effect, it targeted the defense budget at prior year levels with the exception of an amount added on to compensate for estimated inflation.

The Secretary of Defense acted to minimize the effect of the lower target by reapplying funds from fiscal years 1984 and 1985 available from what he said were management improvements, lower inflation, and the latest inflation projections for the fiscal year 1986 budget. His budget offer raised considerable congressional concern about potential excess funds in the Department of Defense (DOD) budget.

Senators Mark O. Hatfield and Alfonse D'Amato asked GAO to review this matter. Congressman Les Aspin later asked GAO for a similar review. This report responds to all three requests.

INDICATIONS OF EXCESS FUNDS

During the 1980's, DOD requested budget authority based on inflated estimates of inflation and has been unable to use appropriated funds at the rates estimated when the funds were requested and appropriated. At the start of fiscal year 1985, DOD had authority to obligate \$427.1 billion. Of this amount, \$284.7 billion was fiscal year 1985 authority; the balance was prior year authority and reimbursable funds. DOD also had unliquidated obligations of \$153.5 billion.

INFLATION

DOD has budgeted \$36.8 billion more for inflation since fiscal year 1982 than was needed to cover inflation. A special multiplier is used for major weapons that accounts for \$9.2 billion of this amount.

GAO was asked to consider alternatives to the current system for dealing with inflation. Three alternatives were considered:

1. Budget for inflation through a revolving fund.

GAO believes there are technical, managerial, measurement, and monitoring problems that make this alternative difficult.

2. Do not budget for inflation (fund inflation with savings or a supplemental appropriation).

Because defense programs, especially weapon systems acquisition programs, take several years to implement and change frequently during that time, it is difficult to distinguish the effects of inflation from the effects of the program changes. Thus, it would be difficult for DOD and the Congress to determine what the supplemental amounts should be.

3. Improve the present inflation estimating system.

Some improvements could be achieved easily, such as eliminating the special multiplier for major weapon systems. Under this alternative, DOD would use the gross national product (GNP) deflator for all non-pay and nonfuel purchases. Then DOD, in consultation with the Office of Management and Budget (OMB), could decide how amounts should be distributed within the DOD budget structure. GAO favors this alternative.

UNOBLIGATED BALANCES

Unobligated balances and lapses from appropriations are likely to be \$64.9 billion by the end of fiscal year 1985. This is \$13.3 billion more than was estimated in DOD's fiscal year 1986 budget. For the past 4 years, DOD has underestimated the level of unobligated balances (and has also allowed funds to lapse). At the end of fiscal year 1984, the total was \$57.9 billion--\$14.1 billion more than DOD reported to Congress in its fiscal year 1985 budget documents. GAO found that these underestimates occurred because DOD was unable to achieve planned obligation rates.

REPROGRAMING ACTIONS

Reprogramming actions in fiscal years 1980-85 totaled about \$26 billion. Reprograming actions have provided DOD with flexibility to reapply funds in excess of program needs.

The DOD procurement accounts sustained the largest and most consistent loss of funds in all fiscal years. Top losses were in the Air Force Aircraft Procurement and Navy Shipbuilding and Conversion accounts. Over the same period, the research, development, test, and evaluation accounts received a steadily increasing amount of funds.

CONCLUSIONS AND RECOMMENDATIONS

Although it has now become apparent that more funds for programs were available in DOD's budget than Congress intended, GAO did not fully assess the total amount of "unneeded funds" or those funds that DOD or the Congress used for other purposes. GAO could not determine the precise amount of excess funds still available in DOD without doing an inordinate amount of work.

Moreover, although DOD has in place an elaborate planning, programing, and budgeting system the accounting system that tracks how funds are actually being used is not directly linked to the budgeting process. Without an integrated budget and accounting system that can routinely produce relevant and vital financial information, GAO could not easily perform an audit of available funds in excess of defense requirements.

GAO continues to believe that DOD needs to improve and integrate its budget and financial management systems. GAO views on such systems are included in previous GAO reports.

In this report, GAO makes recommendations aimed at bringing the funds provided in congressionally approved DOD budgets in line with what is needed to carry out the programs and activities authorized in those budgets.

DOD should make improvements in the existing system used to budget and account for inflation. Therefore, GAO recommends that the Secretary of Defense take the following actions:

- Continue to use the GNP deflator as the basic index for DOD inflation budgeting for the portion of the DOD purchases other than pay and fuel.

- Eliminate the use of a multiplier in budgeting inflation for the major weapon systems accounts.
- Distribute the funds budgeted for inflation among the various DOD appropriations accounts in consultation with OMB. (In effect, this would give DOD flexibility in deciding how to apportion the allowable inflation projections among the nonpay and nonfuel accounts.)
- Monitor any annual inflation dividends or shortfalls that occur and report the latest information to the Congress at the critical stages in the budget process (request, budget resolution, authorization, and appropriations).

AGENCY COMMENTS

Because of the wide range of topics included in this report and the extremely limited period allowed to comment on the draft report, DOD said it would not be able to provide meaningful comments prior to publication of the final report. DOD further said that a detailed response to the final report will be provided as soon as possible after it is received.

C o n t e n t s

APPENDIX		<u>Page</u>
I	Indicators of excess funds	1
	Inflation	1
	Overestimates of Inflation	1
	Special multiplier for major weapon systems	2
	GNP deflator	5
	Availability of inflation dividend	6
	Growth in unobligated balances and lapsed funds	6
	Reprogramming and transfers	9
	Alternatives	12
	Alternative 1: Budget for inflation through a revolving fund	13
	Alternative 2: Do not budget for inflation (fund inflation with savings or a supplemental appropriation)	13
	Alternative 3: Improve present inflation estimating system	13
	Conclusions and recommendations	14
II	Letter from Chairman Hatfield	1
III	Letter from Senator D'Amato	1
IV	Overall objectives, scope, and methodology	1
V	DOD's fiscal year \$4 billion budget offer	1
	The intent of the offer	1
	Details of the offer	2
	Figure: Department of Defense's summary of authorization adjustments--FY 1986 (as of May 21, 1985)	3
VI	Estimation of the size of the inflation dividend	1
	Objectives, scope, and methodology	1
	Details of GAO analysis of DOD inflation budgeting	3
	Figure 1: Description of categories used by DOD to budget for inflation	3
	Figure 2: Major economic price indices used in the GAO analysis	4
	Figure 3: Inflation rates as measured by four major economic indices: FY 1978-84	5

Figure 4: Analysis of the historical relationship between prices of all other defense purchases and prices for the rest of the U.S. economy: FY 1978-84	6
Figure 5: Analysis of the historical relationship between prices of major weapon systems and prices for the rest of the U.S. economy: FY 1978-84	7
Figure 6: The effect of lagged reporting on measurement of weapon system price changes	8
Figure 7: The effect of learning curve assumptions on the measurement of weapon system price changes	9
Figure 8: Analysis of the historical relationships between the prices of defense purchases (nonpay and nonfuel) and prices in the rest of the U.S. economy: FY 1978-84	10
Figure 9: Estimated dividends in the defense budget due to inflation overestimates by appropriations title and fiscal year	11
Figure 10: Estimated size of the inflation dividend for procurement	14
Figure 11: Estimated inflation dividends in DOD budgets	14
Figure 12: Comparison of GAO estimate with alternative estimates of defense inflation dividend	16
Figure 13: The impact of the inflation dividend on real growth in the defense budget	17
VII Unobligated balances and lapsed funds (lapses)	1
Objectives, scope, and methodology	1
Figure 1: DOD's unobligated balances and nonpay TOA	3
Figure 2: Comparison of unobligated balances and DOD budget authority	4
Figure 3: DOD's unobligated balances compared to historical trends	5
Figure 4: Percent of lapses to new budget authority	6
Figure 5: Comparison of new budget authority to total available authority	7

Figure 6: Patterns of monthly obligations	7
Figure 7: Comparison of actual and planned unobligated balances and lapses	8
Figure 8: Obligated balances over the last ten years	9

VIII

Analysis of DOD reprogramming actions--fiscal years 1980-85	
Objectives, scope, and methodology	1
Figure 1: Reprogramming actions applicable to the DOD appropriations acts (fiscal years 1980-85)	3
Figure 2: Distribution of reprogramings (fiscal years 1980-85)	4
Figure 3: Distribution of reprogramings (fiscal year 1980-85)	5
Figure 4: Reprogramming actions applicable to the DOD appropriations acts (fiscal years 1980-85)	6
Figure 5: Distribution of reprogramming actions (fiscal years 1980-85)	7
Figure 6: Reprogramming net gains and losses by title (fiscal years 1980-85)	8
Figure 7: Reprogramming gains and losses by title (fiscal years 1980-85)	9
Figure 8: Reprogramming net gains and losses by service (fiscal years 1980-85)	10
Figure 9: Reprogramming gains and losses by service (fiscal years 1980-85)	11
Figure 10: Reprogramming gains in top ten appropriation accounts (fiscal years 1980-85)	12
Figure 11: Reprogramming losses in top ten appropriation accounts (fiscal years 1980-85)	13
Figure 12: Reprogramming rank order decreases by category (fiscal years 1980-85)	14
Figure 13: Major reasons funds are available (fiscal years 1980-85)	15
Figure 14: Reprogramming rank order increases by category (fiscal years 1980-85)	16

APPENDIX

Page

Figure 15: Major reasons why DOD needs funds (fiscal years 1980-85)	17
Figure 16: Is reinstatement required for accounts losing appropriated funds? (fiscal years 1980-85)	18
Figure 17: Do funds require reinstatement? (fiscal years 1980-85)	19
Figure 18: Rules that apply to DOD reprogramming	20
Figure 19: Sample form, "Reprogramming Action," (DD Form 1415)	22

IX DOD Comments

ABBREVIATIONS

AF	Air Force
ARIMA	Auto-Regressive Integrated Moving Average
BEA	Bureau of Economic Analysis
BLS	Bureau of Labor Statistics
CBO	Congressional Budget Office
COLA	Cost of Living Allowance
CRS	Congressional Research Service
DOD	Department of Defense
FY	Fiscal Year
GAO	General Accounting Office
GNP	Gross National Product
MC	Marine Corps
MCD	Major Commodities Deflation
MILCON	Military Construction
MILPERS	Military Personnel
MRC	Military Reform Caucus
NATO	North Atlantic Treaty Organization
O&M	Operation and Maintenance
OASD	Office of the Assistant Secretary of Defense
OMB	Office of Management and Budget
OPEC	Organization of Petroleum Exporting Countries
OSD	Office of the Secretary of Defense
PA	Prior Approval
PPBS	Planning, Programing, and Budgeting System
PPI	Producer Price Index
PROC	Procurement
RDT&E	Research, Development, Test, and Evaluation
RMIL	Retired Military
SAR	Selected Acquisition Report
SAS	Statistical Analysis Software
SCN	Shipbuilding and Conversion, Navy
TOA	Total Obligational Authority
WTCV	Weapons and Tracked Combat Vehicles, Army

INDICATIONS OF EXCESS FUNDS

This appendix discusses our observations concerning inflation, unobligated balances and lapses, and reprogramming actions. It also includes our conclusions and recommendations.

INFLATION

Controversy over budgeting for inflation is not new to the Department of Defense (DOD). The first time that funds were included in the federal budget to offset expected future inflation occurred in the Navy shipbuilding account in the early 1960's. During the 1970's unexpectedly high rates of inflation eroded the purchasing power of defense appropriations and became a major problem in executing defense procurement programs. As a result, some weapon system acquisition programs were eliminated and others were stretched out.

During the 1980's the effect of inflation on defense budgets has been reversed. Budgets were developed using projected rates that overcompensated DOD for inflation. For example, in the preparation of the budget for fiscal year 1983, the projected increase in the Gross National Product (GNP) deflator was originally 6.5 percent. Its actual increase was 4 percent.

In this section, we evaluate DOD's current system to budget for inflation. We consider how the system may result in an inflation dividend--which we define as the appropriation of funds for inflation in defense program costs which exceed the amounts necessary to finance the inflation which actually occurs. We estimate that DOD budgeted \$36.8 billion more for inflation since fiscal year 1982 than was needed based on current information.

The dividend consists of

--\$27.6 billion due to overestimates of inflation in fiscal years 1982 through 1985 and

--\$9.2 billion due to the use of a special multiplier for major weapon systems.

Overestimates of inflation

To calculate the inflation dividend, we first calculated how much of the original levels of defense appropriations approved by the Congress was allocated to fund future inflation. Then we calculated the amount required to fund inflation in those same years using current knowledge about past and future levels of inflation. Both sets of calculations include a 1.3 multiplier for major weapon systems. By computing the difference between these two amounts, we found that DOD's inflation dividend was \$27.6 billion for fiscal years 1982 through 1985. Figure 1 shows

these results. (See fig. 9, app. VI for additional information.) Because we used the special multiplier for major weapon systems throughout these calculation, these results do not include the additional inflation dividend which accrues from the use of this multiplier. This potential additional dividend is discussed in the next section.

FIGURE 1

ESTIMATED DIVIDENDS IN THE DEFENSE BUDGET DUE TO
INFLATION OVERESTIMATES BY APPROPRIATION TITLE AND FISCAL YEAR
(In billions of dollars)

<u>Appropriation title</u>	<u>FY1982</u>	<u>FY1983</u>	<u>FY1984</u>	<u>FY1985</u>	<u>Total</u>
Military Personnel	\$0.10	\$0.22	\$0.18	\$0.12	\$ 0.62
Operations & Maintenance	1.75	2.84	2.65	1.52	8.76
Procurement	3.83	4.92	3.79	2.23	14.77
Research, Development, Test & Evaluation	0.62	0.87	0.75	0.52	2.76
Military Construction	<u>0.26</u>	<u>0.18</u>	<u>0.14</u>	<u>0.10</u>	<u>0.68</u>
Fiscal year total	<u>\$6.56</u>	<u>\$9.03</u>	<u>\$7.51</u>	<u>\$4.49</u>	<u>\$27.59</u>

Almost half of the dividend, about 54 percent, has occurred within procurement. The largest dividend occurred in fiscal year 1983. For the current fiscal year, the dividend exceeds \$4 billion.¹

Special multiplier for
major weapon systems

In light of high inflation experienced in the 1970's, Deputy Secretary of Defense Frank Carlucci proposed that DOD "budget for inflation" for major weapon systems. In the fall of 1981, OMB granted an exception that permitted DOD to project inflation for major weapon systems at 1.3 times the anticipated increase in the

¹Since the administration submitted the fiscal year 1986 budget, changes in projected inflation have reduced the amount of appropriations needed to compensate for future inflation by \$219 million. This amount is relatively smaller than in previous fiscal years due to the short time period--January 1985 and April 1985--over which inflation expectations have changed. (See fig. 9 in app. VI.)

GNP deflator. For example, if the GNP deflator is projected to rise at 10 percent annually, then major weapon systems prices are projected to rise at 13 percent annually. Consequently, since FY 1983, DOD has applied the 1.3 multiplier to nine procurement accounts that pay for new ships,² aircraft, missiles, and tracked vehicles.

We found little justification for the use of this special multiplier in budgeting for inflation for major weapon systems. Five observations suggest such a multiplier is unnecessary.

First, using this multiplier was justified based on the fact that inflation for major weapon systems is much higher than for most other goods in the economy.³ Since fiscal year 1982, reports prepared by the Bureau of Economic Analysis (BEA) have shown that weapon systems prices increase about twice as fast as prices for other goods. However, measuring the price of weapon systems is considerably more difficult than for most goods in the economy. We believe BEA's reported values of inflation in weapon systems are too high:

--BEA measures weapon systems prices at the time they are delivered to DOD. Because weapon systems are constructed over long periods of time, changes in their prices lag behind changes in prices of most other goods. Therefore, when the general inflation rate falls, inflation appears higher in weapon systems than in other goods in the economy. Conversely, when the general inflation rate rises, this lag (not considering other factors that increase prices) would cause inflation to appear lower for weapon systems than other goods. (See fig. 6 in app. VI.)

--In contracts for new weapons systems it is assumed that unit prices will fall as more units are produced. This phenomenon is often referred to as the "learning curve" or the "progress curve". BEA records inflation for the new weapons based on this assumed price decline.

²Although the Navy uses slightly different procedures to project inflation in its shipbuilding accounts, these procedures are designed to remain consistent with rates established by OSD using the 1.3 multiplier.

³The Bureau of Economic Analysis provides price indices for both major weapon systems and all final goods in the economy. The former is a segment of its price index for all defense purchases; the latter is the GNP deflator.

However, we have found that new weapon system prices usually increase. Therefore, the base price of the weapons is underestimated and subsequent measurements of inflation are overestimated. (See fig. 7 in app. VI.)

Second, even if BEA could accurately measure inflation for weapon systems, our analysis shows that the use of the 1.3 multiplier does not accurately project this inflation. (See app. VI for a description of our regression analysis supporting this conclusion.)

Third, even if weapon system inflation could be measured precisely and even if the 1.3 multiplier accurately projected this inflation, we determined that the prices of all defense purchases (excluding pay and fuel) rose at about the same rate as the GNP deflator. Thus, if DOD budgets separately for inflation in weapon systems by applying a 1.3 multiplier, then for some defense goods, other than major weapon systems, DOD should apply a multiplier less than 1.0.

Fourth, the 1.3 multiplier, even if valid, could not be used permanently. The 1.3 multiplier causes the defense budget to grow faster than the nondefense budget, assuming no change in real program for either defense or nondefense categories. Over time, this growth would lead to the unlikely result that the entire federal budget would be devoted to defense.

Fifth, we do not believe the 1.3 multiplier, which implicitly links inflation projections to actual weapon system inflation, is an efficient budgeting technique. Over the long run, as discussed above, we believe major weapon system inflation will equal the rate of inflation in the general economy. A budgeting system should provide incentives to program managers to control cost growth. Projecting future weapon system prices on the basis of past weapon system prices can become a "self-fulfilling prophecy." Programs in which costs grew rapidly in the past would receive a dividend for this cost growth. Therefore program managers have no incentive to minimize costs.

If, as we believe, the 1.3 multiplier is not needed to compensate DOD fully for weapon system inflation, then its use in fiscal years 1983 through 1985 has resulted in another inflation dividend. If DOD had budgeted for inflation in major weapon systems at a rate equal to projected changes in the GNP deflator, an additional \$9.2 billion would have been saved between fiscal years 1983 and 1985, as shown in figure 2. When combined with the previous estimate of \$27.6 billion, DOD received a total inflation dividend of \$36.8 billion.

FIGURE 2

ESTIMATED INFLATION DIVIDENDS IN DOD BUDGETS
(In billions of dollars)

<u>Fiscal year</u>	<u>Due to overestimates of inflation</u>	<u>Due to use of 1.3 multiplier</u>	<u>Total</u>
1982	\$ 6.6	\$0.0	\$ 6.6
1983	9.0	3.3	12.3
1984	7.5	2.8	10.3
1985	<u>4.5</u>	<u>3.1</u>	<u>7.6</u>
Total	<u>\$27.6</u>	<u>\$9.2</u>	<u>\$36.8</u>

We believe these inflation dividends may have allowed the Defense Department to achieve higher levels of real growth than originally intended by Congress' budget actions. Between fiscal years 1982 and 1985 Congress approved defense budgets which were intended to result in total real growth of 33.5 percent. However, inflation dividends have increased the potential real growth in defense programs to 40.1 percent.⁴

GNP deflator

Some critics of DOD's budgeting system have suggested that projections of the Producer Price Index (PPI) should replace projections of the GNP deflator as the basis for budgeting for inflation. Our analysis shows that the prices of defense purchases have risen at about the same rate as the GNP deflator over the period fiscal year 1978 through fiscal year 1984. This analysis also shows that changes in the GNP deflator more accurately predict changes in defense prices than do changes in the PPI. Consequently, we do not believe that the use of the GNP deflator within the DOD budgeting system has of itself resulted in another inflation dividend. (See app. VI.)

⁴This estimate takes into account the time lag required to recognize the full amount of the inflation dividend. A dividend received in one fiscal year may therefore serve as a base from which the next fiscal year's appropriations are calculated. In this manner, dividends may compound themselves over time, and the total inflation dividend would be higher than the numbers cited above.

Availability of inflation dividend

We do not know how much of the total dividend is still available to the Defense Department. The Secretary of Defense has estimated that Congress reduced the fiscal year 1982 through 1985 Defense budgets by \$8.2 billion for repricings and contract savings. In those accounts where appropriations must be obligated within 3 years or less, some of the dividend may have lapsed or remained obligated. (See app. VII for additional details on unobligated balances and lapses.) Part of it may have been reprogrammed for use in alternative defense programs (see app. VIII).

GROWTH IN UNOBLIGATED
BALANCES AND LAPSED FUNDS

Unobligated balances and lapsed funds (lapses) are a natural part of the full funding concept Congress has supported for weapons procurement and military construction. Because of the large sums involved--\$57.9 billion in fiscal year 1984--and the desire to make the best use of available defense dollars, it is important for DOD to accurately estimate its minimum requirements for unobligated balances and lapses. Otherwise, DOD may get more money than is necessary to fulfill the defense program authorized by Congress.

Unobligated funds are budget authority from a number of years not previously obligated to a contract and not reaching the statutory date of expiration (after which money can no longer be obligated). Lapsed funds are budget authority not obligated before the expiration date.⁵ Since only a portion of the new budget authority is obligated in any one year, DOD plans for a certain amount of unobligated balances and reports the estimated balances to Congress for both the current budget and budget request. DOD projects unobligated balances by subtracting anticipated obligations from total authority to obligate (referred to in this report as total available authority). DOD does not project lapses in its budget request, although lapses are identified in the current year estimates. In fiscal year 1985 this amount was \$74.8 million.

In any given year, DOD's total available authority includes new budget authority, unobligated balances left over from prior fiscal years, reimbursable funds, and deobligated funds. Consequently, funds carried over from previous years provide a greater sum of available authority than the new budget authority appropriated by Congress. For example, in fiscal year 1984 DOD's total available authority was \$385.5 billion; \$258.2 billion of

⁵Under certain conditions, lapsed funds can still be obligated for contract claims and cost growth.

this amount was new budget authority. At the start of fiscal year 1985 DOD had total available authority of \$427.1 billion and \$284.7 billion of this amount was fiscal year 1985 new budget authority; the balance of \$142.4 billion was prior year authority and reimbursables.

No precise criteria define what unobligated balances should be, whether they are too large, or if they are growing too fast. However, Congress provides general guidance to DOD, namely that the level of unobligated balances for any single program should be the minimum funds needed to fulfill the outyear contracts for that program. This level is contingent on the projected or estimated cost of the items originally approved by Congress when the program was first presented for appropriation. It also depends on the number of years that DOD indicated was needed to sign contracts and obligate funds for the approved items. Ideally, the aggregate level of unobligated balances should be the minimum funding (full funding) needed to fulfill the outyear contracts for the sum of the individual programs.

DOD maintains aggregate data on unobligated funds and lapses, but more detailed information on unobligated balances is not readily available. Therefore, we could not determine the appropriate amount of funds required to cover contracts awarded in any year after the budget year.

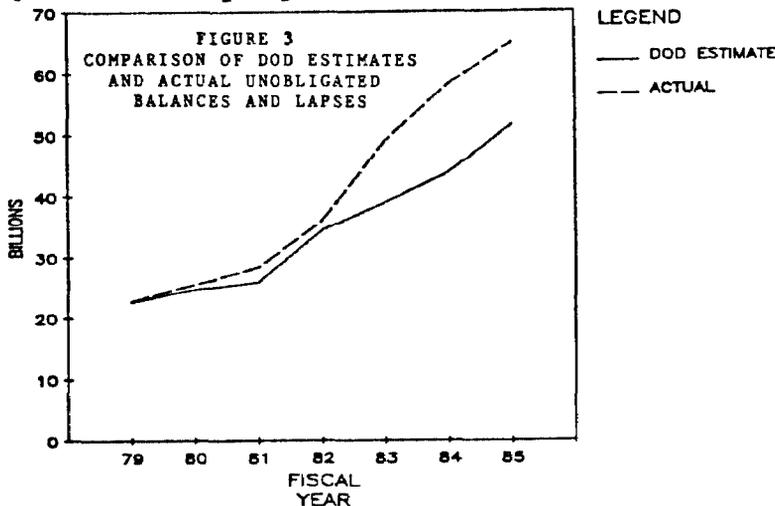
DOD does not assert that unobligated balances should be at any given level. However, a 1982 Congressional Research Service (CRS) report stated that "According to DOD, a relatively constant percentage reflects the fact that unobligated balances have increased 'essentially in line with programs,' an indication of good management."⁶ We found that the proportion of unobligated balances to nonpay TOA has been steadily rising in recent years, from 26.3 percent in 1981, to 31.4 percent in 1984, as shown in figure 1 of appendix VII.

We obtained data from DOD to analyze actual obligation rates and to compare these against DOD projections. The purpose of our analysis was to determine how accurately DOD estimated its unobligated balances and lapses. We found that for the past 4 years DOD has underestimated the level of unobligated balances and has also allowed funds to lapse. At the end of fiscal year 1984, DOD's unobligated balances and lapses totaled \$57.9 billion--\$14.1 billion more than DOD estimated in the fiscal year 1985 budget. We found that this underestimate occurred because DOD was unable to achieve planned obligation rates.

⁶"Unobligated and Unexpended Balances in the Department of Defense Budget: Their Size and Growth," August 10, 1982.

We analyzed DOD's monthly obligations as a share of total available authority for fiscal year 1979 through fiscal year 1984. To compute historical trends in this analysis, we used the Box Jenkins Time Series Analysis, or ARIMA procedure, a technique for analyzing random and systematic movements in time series data. (See ARIMA definition in App. VII.) We then reviewed DOD's actual obligations as a share of total available authority during fiscal year 1984, the planned share, and the share that would have been consistent with historical trends. If historical trends continued, our analysis shows that DOD, would have obligated 84.8 percent of total available authority in fiscal year 1984. DOD had planned to obligate 88.6 percent of total available authority during fiscal year 1984. A review of DOD financial summary tables for fiscal year 1986 shows that DOD actually obligated 85 percent of total available authority--only 0.2 percent more than the historical trend but 3.6 percent less than DOD planned to obligate. Thus, while the fiscal year 1984 obligations did not meet DOD projections-- resulting in lapses and large increases in unobligated balances--obligations during fiscal year 1984 were consistent with historical trends.

The following figure illustrates the recent underestimates of unobligated balances and lapses. The growing gap between the lines illustrates DOD's inability to achieve the increased rate of obligations it projected.



We also analyzed DOD's monthly rates of obligation for the first 8 months of fiscal year 1985. We found that DOD's actual obligations again approximated the historical trends. During that period DOD obligated 56.2 percent of total available authority, which was 0.1 percent higher than the historical trend. We added historical projections of the rates of obligation for June through September 1985 to the actual rates

during the first 8 months of fiscal year 1985. On this basis, we found that DOD will probably obligate 84.8 percent of total available authority. DOD had planned to obligate 87.9 percent of total available authority--3.1 percent more than DOD will likely spend if historical trends continue. Again, DOD had planned to obligate faster than the historical trend, when in fact it is obligating at about the same rate as in fiscal year 1984. As a result, if historical trends continue for the remainder of fiscal year 1985, DOD will accrue unobligated balances and lapses of \$64.9 billion at the end of the current fiscal year--\$13.3 billion more than DOD estimated in the fiscal year 1986 budget.

Prior GAO reports have linked higher than planned unobligated balances to possible excess budget authority. In 1978, GAO analyzed DOD balances of unexpended budget authority and reported that (1) Defense procurement programs had possible excess obligational authority and (2) despite this excess, DOD had not implemented a process for systematic and regular reporting on the availability of excess funds.⁷

DOD's overestimate of obligations is one of many reasons why we continue to believe that current budgeting practices and accounting procedures should be revised. DOD has developed budget-tracking systems for managing individual appropriation account fund levels. However, no system has been developed which integrates program accomplishments with program costs and which insures increased accountability for managing public funds.

Although we identified \$13.3 billion more unobligated balances and lapsed funds than DOD had projected, we could not determine whether these funds are needed to fulfill program requirements or if they are in excess of program needs. We believe more study is needed to determine the program accounts and line items that may contain excess funds.

REPROGRAMING AND TRANSFERS

The Congress has given DOD limited authority to reprogram and transfer⁸ appropriated funds--that is, to use money for different purposes than was planned at the time the funds were appropriated. This flexibility in the execution of the budget is available because the Congress recognizes that unforeseen

⁷Analysis of Department of Defense Unobligated Budget Authority
(PAD 78-34, Jan. 13, 1978; p. i and ii)

⁸Although the terms transfer and reprograming are often used interchangeably, there is a fundamental distinction. Transfers are movements of funds between appropriation accounts while reprogramings are movements of funds within accounts.

developments may make it necessary to reapply funds through reprogramings or transfers. The total dollar value of reprograming actions for fiscal years 1980 through 1985 is about \$26.1 billion. For the first 10 months of fiscal year 1985 reprograming actions total almost \$5.2 billion. Although the dollar value of reprogramings has increased between 1980 and 1985, as a percentage of total obligational authority (TOA) it has remained relatively constant at about 2 percent.

The general guidance provided by Congress for reprogramings allows the Secretary of Defense to reprogram funds, provided such authority is used ". . . for higher priority items based on unforeseen military requirements than those for which originally appropriated and in no case where the item for which funds are requested have been denied by Congress."⁹

Congress has in the past raised concern over whether reprogramming procedures have provided DOD too much flexibility. A 1955 House Appropriations Committee report stated that ". . . the mere fact that there was a lessened requirement in one category of cost does not imply either the right or the need to correspondingly increase some other category of cost embraced by the appropriation."¹⁰ Moreover, it has been stated that Congress did not intend the use of savings in reprogramming actions "to be treated as a windfall, or as a slush fund to be applied someplace else."¹¹

Over the years, Congress has sought to improve control over reprogramings, resulting in the establishment of a detailed set of procedures and rules which DOD must follow. (Details about reprogramming procedures are provided in fig. 18 of app. VIII.) There is no statutory limit on the amount of money that may be reprogramed within an appropriation account--provided that amount does not breach the thresholds established for an above-threshold action. The Congress annually sets limits on the total amount of money that may be transferred between appropriation accounts in its annual appropriation act; however, this limit may be increased in the supplemental appropriations act. In fiscal year 1985, the limit was \$1.2 billion.

We analyzed reprogramming actions by DOD in fiscal years 1980 through 1985 to determine the following:

--dollar value and volume of proposed actions,

⁹Public Law 98-473, section 8025

¹⁰H.R. 493, 84th Congress, 1955, p. 8.

¹¹Louis Fisher, Presidential Spending Power, Princeton Paperbooks (Princeton) 1972, p. 82

- reasons money is needed and became available,
- changes in reasons over time,
- net gains and losses in titles, services, and appropriation accounts, and
- funds available in excess of original requirements.

Our analysis points out recent trends about reprogramming actions in general and also about reprogramming actions for one specific category--those which are "above threshold."

Reprogramming actions fall into three broad categories: above-threshold, below-threshold, and internal reprogrammings. Above-threshold actions may either require congressional notification or prior approval. If an action increases authorized procurement quantities or has been designated as an item of congressional interest, prior approval is required. Prior approval is also required for transferring funds between accounts. Notification to the Congress is required for reprogramming actions which meet or exceed given thresholds (see discussion in fig. 18 app. VIII). Below-threshold actions are those that fall below the above designated limits and do not require notification to the Congress, except when follow-on costs exceed thresholds. Internal reprogrammings include those actions that reclassify or realign funds but are not subject to threshold limitations.

We found that from fiscal year 1980 to fiscal year 1985, the dollar value of above-threshold actions was about \$10.2 billion, or 39 percent of the total. Below-threshold actions were slightly less at \$9.4 billion, but accounted for a much greater number of total actions (92 percent). About \$6.5 billion was internally reprogrammed.

Most of our analysis was dedicated to above-threshold actions, because information on these actions was most readily available and documented.

Our analysis demonstrates the following:

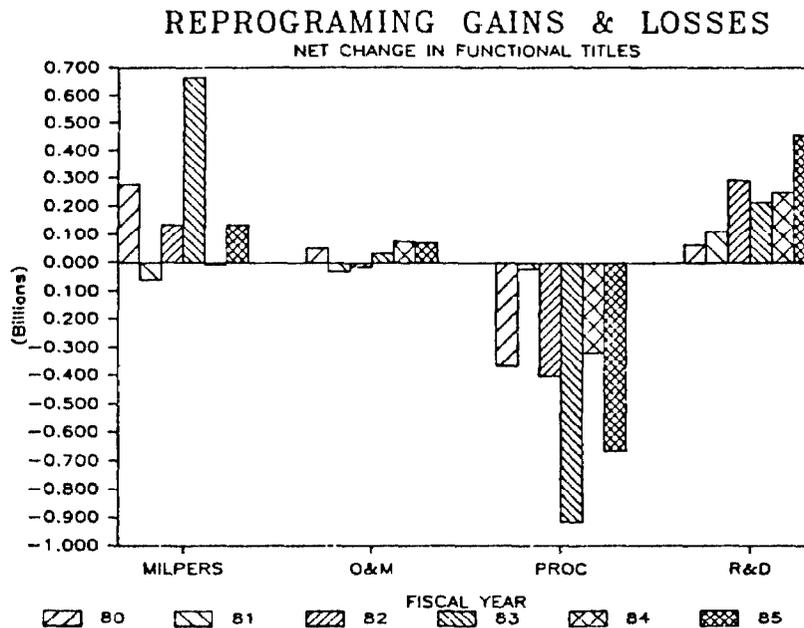
- In recent years less money was reprogrammed to solve program problems and more money was reprogrammed to fund unplanned requirements or other items, primarily classified programs. (See figs. 14 and 15 in app. VIII.)
- Also, in recent years there was a sharp increase in the supply of reprogramming funds made available from what DOD identified as cost savings (i.e., contract savings,

overestimated funding requirements, or resulting from management initiatives). (See figs. 12 and 13 in app. VIII.)

--Reprogrammed funds that DOD identified as not needing reinstatement increased from about \$602 million in fiscal year 1980 to nearly \$1.9 billion in fiscal year 1985. Eighty-four percent of the funds reprogrammed above threshold in fiscal year 1985 were in excess of original requirements. (See figs. 16 and 17 in app. VIII.)

--As shown in the following figure, the DOD procurement accounts sustained the largest and most consistent loss of funds in all fiscal years. Top losses were in Aircraft Procurement, Air Force, and Shipbuilding and Conversion, Navy. Over the same period, research, development, test, and evaluation (RDTE) accounts received a steadily increasing amount of funds. In fiscal year 1983 Congress directed DOD to absorb part of the pay raise rather than provide supplemental appropriations. Army gave up the largest share of funds while the defense agencies (e.g., the Defense Nuclear Agency, National Security Agency, Defense Contract Audit Agency, Defense Logistics Agency, and others) gained funds during this period. (See figs. 6 through 11 in app. VIII.)

FIGURE 4



As a result of our analysis we concluded that as a percentage of TOA reprogramming actions have remained relatively constant. However, data analyzed from DOD reprogramming forms indicated that about \$1.9 billion recently made available for above-threshold reprogramming was in excess of the purposes originally justified. These funds, for the most part, have become available because of contract savings or overestimates of funds required to support program purposes.

ALTERNATIVES

We were asked to consider alternatives to the current system of reporting and compensating for inflation and to make recommendations. In analyzing possible recommendations we looked at three alternatives and explored their advantages and disadvantages.

Alternative 1: Budget for inflation through a revolving fund

This alternative would change the current system so that savings from overestimates of inflation would be transferred into a revolving fund. In the reverse, funds needed due to underestimates of inflation would be drawn from the revolving fund. There could be instances where funds would be insufficient, requiring additional funds. In those cases, it would be difficult for DOD and the Congress to determine what the supplemental amounts should be. In theory, in this system DOD would neither benefit nor be hurt by misestimations of inflation. However, there are technical, managerial, measurement, and monitoring problems that make this alternative difficult.

Alternative 2: Do not budget for inflation (fund inflation with savings or a supplemental appropriation)

This alternative would require that DOD pay for inflation out of program funds. When these funds are not adequate, DOD could request additional funds from the Congress. If these funds were not appropriated, it could lead to a reduction in the real level of the program. Another problem is that it often takes several years to implement defense programs and the programs change during implementation. Even after the fact, it is difficult to distinguish the effects of inflation from the effects of the program changes. These distinctions are even more difficult to make during implementation, when the situation is further complicated by adjustments in the program schedule. Thus it would be difficult for DOD and the Congress to determine what the supplemental amounts should be.

If budgeting for inflation causes prices to rise, then it would be better not to provide funds for estimated inflation. However, in the late 1960's and early 1970's, budgeting for inflation was not the cause of inflation. Rather, inflation prompted agencies to seek permission to add amounts that would compensate for losses in purchasing power they were experiencing because of high inflation. So long as inflation remains low this would be a viable alternative. If inflation were to rise, it would be harder to manage.

Alternative 3: Improve the present inflation estimating system

Some improvements in the inflation estimating and reporting system could be achieved easily, such as eliminating the 1.3 multiplier for major weapon systems. DOD should use the GNP deflator for all nonpay, nonfuel purchases. Then DOD, in consultation with OMB, should decide how amounts should be distributed within the DOD budget structure.

CONCLUSIONS AND RECOMMENDATIONS

Although it has now become apparent that more funds for programs were available in DOD's budget than Congress intended, we did not fully assess the total amount of "unneeded funds" or those funds that DOD or the Congress used for other purposes.

Although DOD has in place an elaborate planning, programing, and budgeting system the accounting system that tracks how funds are actually being used is not directly linked to the budgeting process. Without an integrated budget and accounting system that can routinely produce relevant and vital financial information, we could not easily perform an audit of available funds in excess of defense requirements.

We are making recommendations aimed at bringing the funds provided in congressionally approved DOD budgets in line with what is needed to carry out the programs and activities authorized in those budgets.

DOD should make improvements in the existing system used to budget and account for inflation. Therefore, we recommend that the Secretary of Defense take the following actions:

- Continue to use the GNP deflator as the basic index for DOD inflation budgeting for DOD purchases other than pay and fuel.

- Eliminate the use of a multiplier in budgeting inflation for the major weapon systems accounts.
- Distribute the funds budgeted for inflation among the various DOD appropriations accounts in consultation with OMB. (In effect, this would give DOD flexibility in deciding how to apportion the allowable inflation projections among the nonpay and nonfuel accounts.)
- Monitor any annual inflation dividends or shortfalls that occur and report the latest information to the Congress at the critical stages in the budget process (request, budget resolution, authorization, and appropriations).

We continue to believe that DOD needs to improve and integrate its budget and financial management systems. Our views on such systems are included in previous GAO reports (GAO/AFMD-85-35 and GAO/AFMD-85-35A, February 1985.)

MARK O. HATFIELD, OREGON, CHAIRMAN

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United States Senate

COMMITTEE ON APPROPRIATIONS

WASHINGTON, DC 20510

J. KEITH KENNEDY, STAFF DIRECTOR
FRANCIS J. SULLIVAN, MINORITY STAFF DIRECTOR

May 22, 1985

The Honorable
Charles Bowsher
Comptroller General of the
United States
General Accounting Office
Washington, D.C. 20548

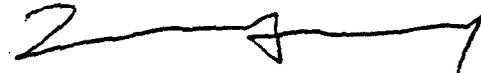
Dear Mr. Bowsher:

Pursuant to your exchange with Senator D'Amato in the Legislative Branch Appropriations Subcommittee hearing yesterday, this is to officially request that the General Accounting Office undertake an investigation of the Department of Defense's sudden discovery of \$4,000,000,000 in unobligated balances in contingency funds that are now being applied to other programs.

The Committee should have a full report detailing the programs and purposes for which the funds were first appropriated; the changing circumstances that allowed the funds to become available for other purposes; the accounting process used in the discovery of these balances, and the timing of that discovery; whether or not other unobligated balances of a similar nature exist, and their magnitude; and other issues pertinent to this matter. Further, GAO should make recommendations on how similar episodes can be avoided in the future.

Your response to this request at the earliest possible time would be greatly appreciated. Any questions about the request can be directed to Mr. Keith Kennedy of the Committee staff at 224-7251.

Sincerely,



Mark O. Hatfield
Chairman

United States Senate

WASHINGTON, DC 20510

May 28, 1985

The Honorable Charles Bowsher
Comptroller General of the United States
General Accounting Office
Washington, D.C. 20548

Dear Mr. Bowsher:

The recent announcement by the Department of Defense that it had "discovered" \$4 billion in unobligated balances has made many in Congress question the auditing procedures used in accounting for DOD funds. Frankly, it is totally unacceptable that such large amounts of money should be relatively unaccounted for for long periods of time.

We in the Congress need to know what is going on. The purpose of this letter, therefore, is to followup on the questions I asked you at the May 21 Legislative Branch Appropriations Subcommittee hearing with regard to this multi-billion dollar contingency fund.

The biggest question, put very simply, is whether or not this is a slush fund. Other important questions, of course, are precisely how much money we are talking about, where it came from, and for what purpose it is going to be used.

I realize that contracting delays and other problems may result in a small reserve of unobligated balances. However, the sheer magnitude of the \$4 billion -- which some reports indicate may be as much as 10 times that size -- is definite cause for alarm. Its origin must be investigated, as must the system which allowed it to accumulate.

At the hearing you mentioned GAO's recent two volume report on problems with the Federal Government's budgeting and accounting system. Based on this information, and on GAO's many years of experience in reviewing financial procedures, I believe GAO is the appropriate agency to get to the bottom of the current situation and to provide recommendations to Congress on how to rectify those problems which do exist.

Thus, I am asking that the interim report you promised to provide on this subject prior to Congress' July 4 recess include at least the following.

- * How much money exists in DOD unobligated balances?
- * For what programs and purposes were these funds originally appropriated and why were they not spent on these programs?
- * Under what accounting mechanism did such large quantities of funds remain "undiscovered" for so long and what accounting procedures led to their eventual "discovery?"
- * Do other Federal agencies have unobligated balances of a similar nature? If so, what is their magnitude?
- * What is the current system used by DOD and other agencies to account for inflation? What are the problems inherent in this system?
- * What system does DOD use to promptly identify, monitor, reallocate, or notify Congress of unspent funds?
- * What recommendations can you make to correct any of the problems identified in answers to the above questions?

In answering the above questions, please provide the estimated cost of implementing the recommendations you make and a statement as to whether you believe such changes would be cost-effective.

I realize the June report will be only an interim set of recommendations and that your full-scale investigation will not be completed until later. However, I urge you to share whatever information and recommendations you develop with Congress in a timely fashion. We cannot avoid the issue of multi-billion dollar contingency funds.

Sincerely,



Alfonse D'Amato
United States Senator

AD:brr

OBJECTIVES, SCOPE, AND METHODOLOGY

The methodology used to look at the indicators is explained in appendices VI, VII, and VIII.

There is no audit trail which shows precisely where excess funds in DOD would reside. Consequently, to determine if a potential for excess funds exists in the DOD budget, we looked at macro indicators which point to DOD's capacity to absorb appropriated funds as planned. The indicators we examined were

- inflation assumptions,
- total available budget authority,
- unobligated balances and lapses,
- unliquidated obligations, and
- reprogramming actions.

We interviewed top level financial managers at the Office of the Secretary of Defense, the three services, the Office of Management and Budget, and the Bureau of Economics Analysis. We attended briefings with staff from several congressional committees, the Congressional Budget Office, and the Congressional Research Service to discuss ongoing work relating to our review. We held several meetings with top budget and program managers at DOD to obtain detailed financial data and information on DOD budgeting techniques.

This review was made in accordance with generally accepted government auditing standards with one exception. DOD was given 4 days, rather than 30 days, to comment on the report so that we could report by September 3, 1985, as requested. DOD declined to comment before the report was issued. We obtained comments from various experts and incorporated their comments where appropriate.

Since GAO is--in another effort--conducting a government-wide study of unobligated balances, that report will answer the question of how DOD unobligated balances compare to those in civil agencies.

DOD'S FISCAL YEAR 1986 \$4 BILLION BUDGET OFFER

Shortly after the Senate Budget Committee passed a budget resolution calling for zero growth in the FY 1986 military appropriation, the Secretary of Defense requested that Congress "recognize early" the \$4 billion in what he called his "regular inflation savings" so that DOD "could meet the spending limits of the resolution and minimize the impact on national security." The Secretary emphasized that this was not a new procedure, and, in fact, the administration had recommended specific reductions in the DOD budget each year since 1981. According to the Secretary, in past years, savings of this nature were usually identified in the normal course of deliberating the defense budget. This year he simply wanted Congress to recognize savings early so that DOD "could meet the spending limits of the resolution and minimize the impact on national security."

From the perspective of many members of Congress, the announcement was not early, but came too late. They had been seeking information about surplus money for months, but the Pentagon did not release data until the budget freeze was a certainty. The timing of the offer after a crucial budget decision served to increase prior concern about the actual size of excess funds at DOD.

THE INTENT OF THE OFFER

The \$4 billion budget offer was not intended to be a further reduction to the Senate budget resolution. Instead, it was to be used to offset the effect of the budget resolution. This would require that the Congress direct DOD to reprogram the money to purposes that were not funded in the fiscal year 1986 budget. Thus, the total available authority (includes new and old budget authority and reimbursements) to the DOD would increase without increasing estimates of future outlays or the deficit. Other surpluses could be reapplied in a similar way to further mitigate the effect of a funding freeze.

On the other hand, the Congress could use identified budget surpluses to reduce the fiscal year 1986 appropriation, thereby lowering estimates of both spending and the deficit, as in the past. In both the May 1982 Deficit Reduction Plan and the May 1984 Rose Garden Agreement, the President directed actual reductions in DOD budget authority to reduce the size of the deficit. In June 1983, OMB also directed similar cuts in budget authority because of reduced fuel prices and lower inflation.

DETAILS OF THE OFFER

The "Summary Authorization Adjustments" in the figure below show the details of the \$4 billion budget offer. After reviewing inflation estimates and the execution status of DOD's budget for fiscal years 1984 and 1985, the Office of Assistant Secretary of Defense identified the sources of funds at an appropriations account level. Excess funds were categorized as inflation savings, unobligated balances, and industrial fund and stock fund cash. Another category hinges on approval of a change in the investment expense criteria.

Using a top-down approach, DOD directed services to identify specific reductions and affected programs. The Office of Secretary of Defense listed examples of possible cuts in the procurement accounts, but only identified specific reductions in research, development, test, and evaluation accounts. The services were assessed percentages of the total and were committed to identify line-item reductions in the budget. As of today, DOD has not released further information about program reductions.

FIGURE

DEPARTMENT OF DEFENSE'S (AS OF MAY 21, 1985)
SUMMARY AUTHORIZATION ADJUSTMENTS - FY 1986
(\$ in Millions)

	Industrial Fund	Investment Expense Criteria	Stock Fund Cash	Prior Year Inflation		FY 1986 Inflation	Unobligated Balances FY 1985	TOTAL
				FY 84	FY 85			
O&M, Army	-60.0	-31.0	-182.7	-	-	-11.0	-	-284.7
O&M, Navy	-70.0	-42.1	-340.2	-	-	-15.0	-	-467.3
O&M, M.C.	-	-2.9	-14.0	-	-	-	-	-16.9
O&M, A.F.	-70.0	-15.5	-99.4	-	-	-13.0	-	-197.9
O&M, Def Ag.	-	-3.0	-7.0	-	-	-	-	-10.0
O&M, Army Res.	-	-	-9.1	-	-	-	-	-9.1
O&M, Navy Res.	-	-3.4	-20.3	-	-	-	-	-23.7
O&M, M.C. Res.	-	-	-2.1	-	-	-	-	-2.1
O&M, A.F. Res.	-	-0.2	-3.5	-	-	-	-	-3.7
O&M, Army Guard	-	-1.0	-14.0	-	-	-	-	-15.0
O&M, A.F. Guard	-	-0.9	-7.7	-	-	-	-	-8.6
O&M Summary	-200.0	-100.0	-700.0	-	-	-39.0	-	-1,039.0
Aircraft, Army	-	-	-	-	-	-5.0	-40.0	-45.0
Missiles, Army	-	-	-	-	-	-4.0	-25.0	-29.0
WTCV, Army	-	-	-	-	-	-7.0	-75.0	-82.0
Ammunition, Army	-	-	-	-30.0	-48.0	-3.0	-62.0	-143.0
Other Procurement, Army	-	-	-	-79.0	-95.0	-5.0	-64.0	-243.0
Aircraft, Navy	-	-	-	-	-	-15.0	-109.0	-124.0
Weapons, Navy	-	-	-	-	-	-7.0	-15.0	-22.0
SCN	-	-	-	-229.0*	-108.0	-14.0	-85.0	-436.0
Other Procurement, Navy	-	-	-	-70.0	-98.0	-6.0	-53.0	-227.0
Procurement, M.C.	-	-	-	-	-	-2.0	-28.0	-30.0
Aircraft, A.F.	-	-	-	-	-	-32.0	-406.0	-438.0
Missiles, A.F.	-	-	-	-	-	-13.0	-35.0	-48.0
Other Procurement, A.F.	-	-	-	-86.0	-156.0	-9.0	-10.0	-291.0
Procurement, Def. Ag.	-	-	-	-15.0	-21.0	-1.0	-	-37.0
PROCUREMENT Summary	-	-	-	-509.0	-526.0	-123.0	-1,037.0	-2,195.0
ROTCR, Army	-	-	-	-	-40.0	-4.0	-49.0	-93.0
ROTCR, Navy	-	-	-	-	-60.0	-11.0	-123.0	-194.0
ROTCR, A.F.	-	-	-	-	-100.0	-14.0	-156.0	-270.0
ROTCR, Def Ag.	-	-	-	-	-	-	-151.0	-151.0
ROTCR	-	-	-	-	-200.0	-29.0	-479.0	-708.0
Mil Con, Army	-	-	-	-	-	-	-	-
Mil Con, Navy	-	-	-	-	-	-	-	-
Mil Con, A.F.	-	-	-	-	-	-	-	-
NATO Infrastructure	-	-	-	-	-	-	-60.0	-60.0
Mil Con	-	-	-	-	-	-	-60.0	-60.0
TOTAL DOD	-200.0	-100.0	-700.0	-509.0	-726.0	-191.0	-1,576.0	-4,002.0

SERVICE SUMMARY

	Industrial Fund	Investment Expense Criteria	Stock Fund Cash	Prior Year Inflation		FY 1986 Inflation	Unobligated Balances FY 1985	TOTAL
				FY 84	FY 85			
ARMY	-60.0	-32.9	-205.8	-109.0	-183.0	-39.0	-315.0	-944.7
NAVY	-70.0	-48.4	-376.6	-299.0*	-266.0	-70.0	-413.0	-1,543.0
AIR FORCE	-70.0	-15.7	-110.6	-86.0	-256.0	-81.0	-637.0	-1,256.3
AGENCIES	-	-3.0	-7.0	-15.0	-21.0	-1.0	-211.0	-258.0

* Includes \$129 million from FY 1983 Program.

ESTIMATION OF THE SIZE OF THE INFLATION DIVIDENDOBJECTIVES, SCOPE, AND METHODOLOGY

In our analysis of inflation dividends in the Defense budget, we examined two basic issues. First, we assessed the accuracy of the factors used in the current system of budgeting for inflation. Second, we estimated the magnitude of increased defense budget authority which has resulted recently from using projections which overestimated future inflation levels.

We concentrated our analysis of factors on those used for weapon systems purchases and for the purchases of all non-personnel, nonfuel, and nonweapon system goods. These two types of purchases account for approximately 66 percent of the total defense budget. We analyzed the way Bureau of Economic Analysis (BEA) constructs estimates of price changes in all defense goods and more specifically in weapon systems. We discussed our analysis with officials of both the BEA and DOD.

We compared all available historical data on price changes in defense goods, compiled by BEA for fiscal years 1978 through 1984, with price changes in other major economic price indices. We identified alternative procedures for projecting changes in defense prices and analyzed whether these procedures would have produced better estimates of actual defense price changes over the same period.

In the case of nonpay, nonfuel, and nonweapon systems purchases, DOD currently projects these prices to change at the same rate as the projections of the GNP deflator issued by the Office of Management and Budget (OMB) as part of their guidance in budget preparation. As an alternative, we analyzed projections based upon changes in the industrial component of the Producer Price Index (PPI.) We chose the PPI-industrial index because it is often cited by defense authorities as covering a range of goods similar to those purchased by DOD. Also, the data are available which measure price changes on a fiscal year basis.

We also analyzed the use of a 1.3 multiplier in constructing estimates of future inflation rates in weapon systems' prices. As alternative to the use of the 1.3 multiplier, we identified the use of a 1.0 multiplier, i.e., the budgeting for weapon systems inflation in the same manner as nonpay, nonfuel, and nonweapon systems purchases. We analyzed the ability of each multiplier to predict accurately the changes in weapon system prices over the period fiscal year 1978 through fiscal year 1984.

In assessing the overestimates of future inflation on defense budget authority, we constructed a data base from defense publications (annual editions of the National Defense Budget Estimates volume published by the Office of the Assistant Secretary of Defense, Comptroller) and unpublished data furnished by defense officials. Information in this data base matched that available to officials at the time the original budget was approved. This data base also contained the best information currently available. This data base included Total Obligational Authority (TOA) by appropriation account and the type of item being purchased. It also contained inflation projections for each type of item being purchased and spendout rates which projected when outlays would occur (by year) in each appropriation account.

For the analysis, we estimated--for each category of purchases--the amount of money needed to pay for the inflation anticipated at the time the budget was approved. We also estimated the amount of money which would have been needed for inflation if we had known during these budget preparations what we know now. The difference between the original high estimate and the current lower estimate of inflation funding was defined as the inflation dividend received by DOD.

For fiscal years 1982 through 1985, our estimates for the inflation dividend are slightly lower than the actual dividend. The TOA levels used in these calculations are the TOA levels actually appropriated. Because recent TOA levels are lower than the originally approved amounts, the current TOA levels used in our calculations are lower than those originally approved by Congress. Therefore, the inflation dividend estimated within each appropriation is also lower than the one which existed at the time of original budget approval.

We also performed inflation dividend calculations for the fiscal year 1986 budget. In these calculations we used the TOA levels specified in the administration's budget submission, not actually approved levels of TOA. Because the changes in inflation expectations that have occurred since fiscal year 1986 submission are small, the estimated inflation dividend in the fiscal year 1986 budget is also small.

Our initial set of calculations was compared to a similar set of calculations prepared by DOD officials in support of the \$4 billion savings offer made by Secretary Weinberger. The discrepancies identified in this comparison were discussed informally with defense officials and the appropriate corrections made in the GAO estimation procedures.

Officials of the BEA also reviewed and provided informal comments to our draft report. To the extent possible, their comments have been incorporated in this report.

Details of GAO analysis of DOD inflation budgeting

FIGURE 1

DESCRIPTION OF CATEGORIES USED BY DOD TO
BUDGET FOR INFLATION

Description	Pay	Fuel	Major Weapon Systems	All Other Purchases
Appropriations titles in which the category appears	Military Personnel O&M	O&M RDT&E	Procurement	All
Spendout period	One year	One year	Up to 7 years	Up to 5 years
Percent of total budget	32%	2%	26%	40%
Deflator used for projection	OMB projections of government salary increases	Special projections of fuel prices	1.3 times projections of GNP deflator	Projections of GNP deflator
Alternatives analyzed by GAO	- -	- -	1.0 times projections of GNP deflator 1.0 times projections of PPI	Projection of Producer Price Index

In constructing estimates of funds needed to offset inflation in future defense expenditures, DOD divides its expenditures into four separate categories of goods: pay, fuel, major weapon systems, and all other purchases. In each category, price increases are predicted using a different index. For pay, increases are projected to equal the increases in civilian and military pay proposed in the President's budget submission. For fuel prices, a special projection of fuel prices is used. Virtually all pay and fuel purchases occur within the year of the budget. Consequently, inflation projections in succeeding fiscal years do not matter much for pay and fuel.

In the major weapon systems and all-other-purchases categories, projections of future inflation rates are required for a number of fiscal years. As an example, outlays for the purchase of a ship can occur for many years after the funds are originally authorized. For both of these categories, projected inflation is based upon projected GNP deflator rates approved by the Office of Management and Budget. For the all-other-purchases category, prices are assumed to increase at the same rate as the projected change in the GNP deflator. For the major weapon system category, prices are assumed to increase at a rate equal to 1.3 times the projected change in the GNP deflator.

FIGURE 2

MAJOR ECONOMIC PRICE INDICES USED IN THE GAO ANALYSIS

Index	Constructed by	Available Since	Coverage
GNP Deflator	BEA	1929	All final goods and services sold in U.S.
Producer Price Index-Industrials	BLS	1890	Goods produced for sale in U.S. primary markets
DOD Purchases Deflator	BEA	1972	All nonpay, nonfuel purchases of the Defense Department
All-Other-Purchases Deflator	BEA	1972	All nonpay, nonfuel, and nonmajor weapon system purchases of the Defense Department
Major Commodities Deflator	BEA	1978	All major weapon system purchases of the Defense Department

To analyze the way DOD budgets for inflation, we gathered data on five major price indices: (1) the GNP deflator, (2) the industrial component of the PPI, (3) the DOD purchases deflator, (4) the all-other-purchases deflator, and (5) the major commodity deflator (MCD). The industrial component of the PPI was chosen because data for this index are available on a fiscal

year basis comparable to the other indices. The DOD purchases deflator includes prices of goods in the major weapon systems category, but excludes the pay and fuel categories of purchases. The all-other-purchases deflator excludes major weapon systems, pay, and fuel purchases. The major commodity deflator includes only the purchases of major weapon systems.

The PPI is constructed by the Bureau of Labor Statistics. All other indices are constructed by the Department of Commerce BEA. The time period covered by our data base is fiscal year 1978 to fiscal year 1984. Fiscal year 1978 is the first year for which the BEA publishes data on price changes for major weapon systems. Fiscal year 1984 is the most recent year for which defense price data are available.

Figure 3 shows rates of price increases since fiscal year 1978 as measured by four of these indices. (Increases in the DOD purchases deflator are not shown.) The decrease in inflation during the 1980's is clearly displayed in each index. The rate of increase in the PPI has declined more rapidly than the other three indices. Also, price increases in the major commodity deflator have been much larger than measured by the other indices over the past 3 years.

FIGURE 3

INFLATION RATES AS MEASURED BY FOUR MAJOR ECONOMIC INDICES: FY 1978-84

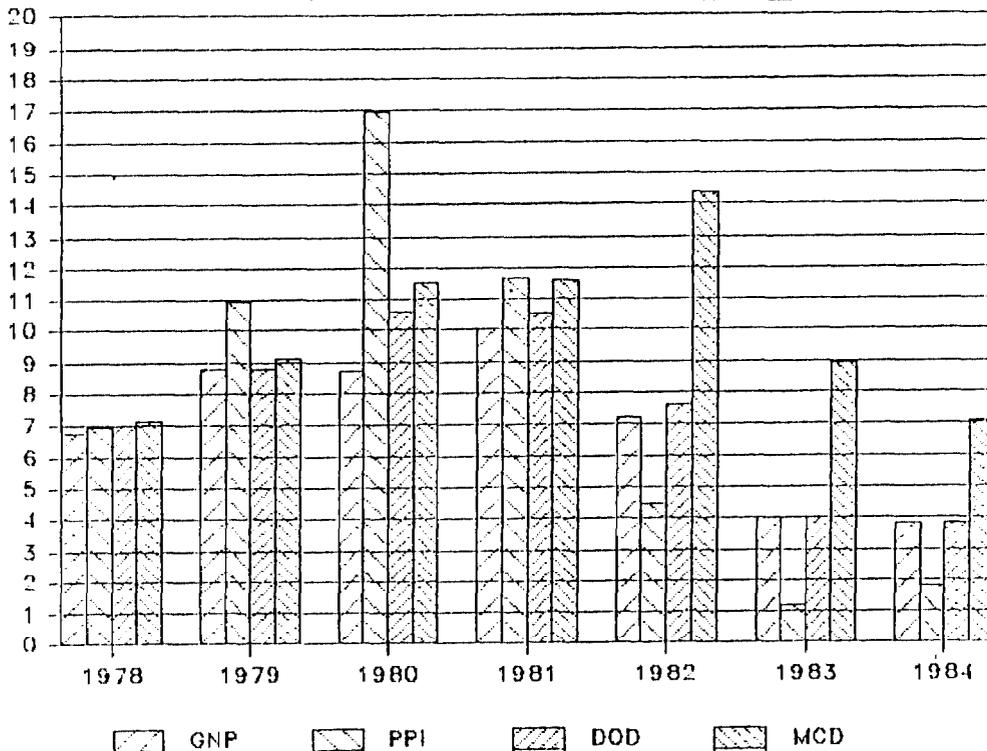


FIGURE 4

ANALYSIS OF THE HISTORICAL RELATIONSHIP BETWEEN
PRICES OF ALL OTHER DEFENSE PURCHASES AND PRICES
FOR THE REST OF THE U.S. ECONOMY: FY1978-84

Statistics	Changes in GNP Deflator	Changes in PPI-Industrial
Constant	-0.525	4.038
t Statistic	-0.643	5.295
Slope Coefficient	1.139	0.447
t Statistic	10.307	5.514
R ²	0.955	0.859
Durbin Watson Statistic	3.022	1.688

Figure 4 analyzes the relationships between the prices in the all-other defense purchases category and prices in the rest of the U.S. economy. Prices in the rest of the U.S. economy are measured by the GNP deflator and the PPI-industrial. The regression of changes in prices of all other defense purchases on changes in the GNP deflator performed well. The relationship is significant at the 1-percent confidence level. The estimated slope coefficient is not statistically different from unity. This suggests changes in the GNP deflator are almost identical to changes in the defense purchases deflator. (The best test for such a relationship is an F test on both the slope and constant coefficients. The F test does not reject the null hypothesis at the 5-percent level of confidence. Also the value of the slope coefficient is not appreciably affected by applying a correction for first order serial correlation.) The regression of changes in the all-other defense purchases deflator on changes in the PPI-industrial index does not perform as well. Although the slope coefficient is statistically significant, its R² level is lower than that of the first regression, and its slope coefficient is statistically distinct from unity.

FIGURE 5

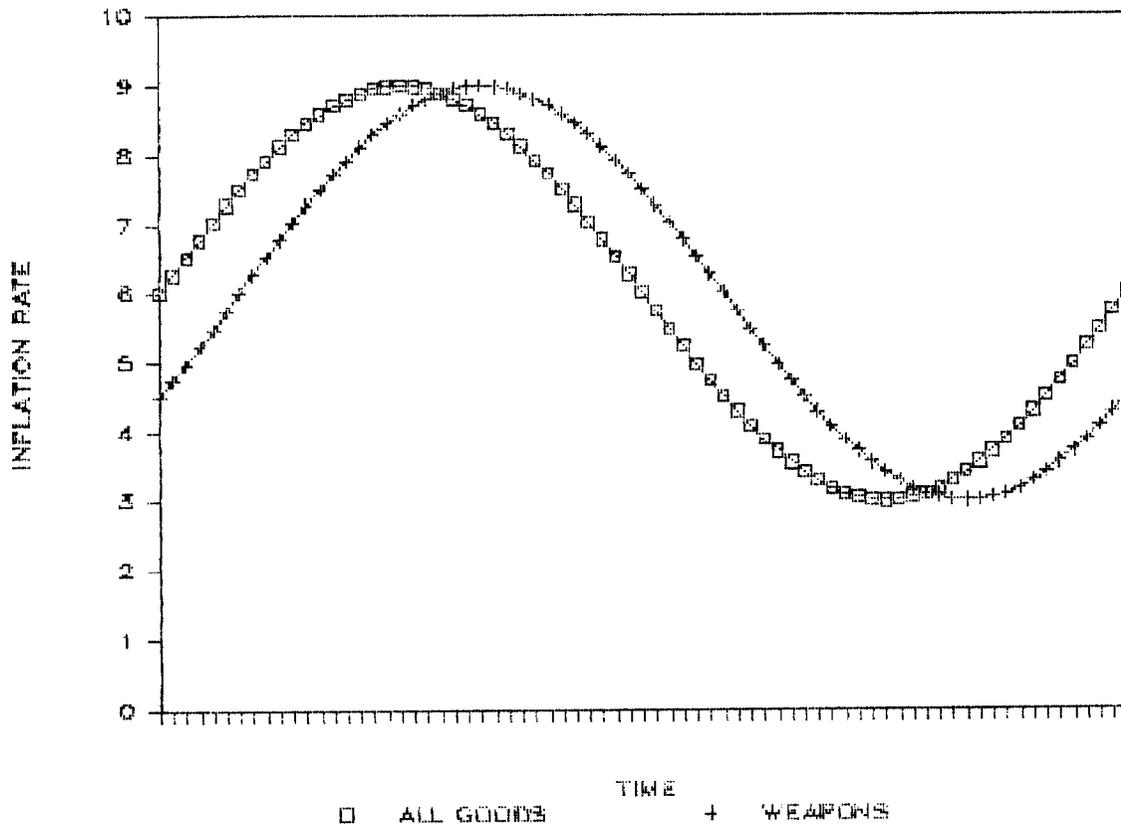
ANALYSIS OF THE HISTORICAL RELATIONSHIP BETWEEN
MAJOR WEAPON SYSTEMS AND PRICES FOR THE REST OF THE
U.S. ECONOMY: FY1978-84

Statistics	Changes in GNP Deflator	Changes in PPI- Industrial
Constant	5.880	8.779
t Statistic	1.874	4.799
Slope Coefficient	0.579	0.153
t Statistic	1.362	0.783
R ²	0.271	0.109
Durbin Watson Statistic	1.362	1.256

We used the same data base to analyze the relationship between prices of major weapon systems and the prices in the rest of the U.S. economy. Figure 5 shows the results of the regression of changes in the major commodities deflator (MCD) on changes in the GNP deflator and the regression of changes in the MCD on the changes in PPI-industrials. Neither regression performs well. Neither slope coefficient is statistically different from zero--indicating data do not reject a hypothesis that no relationship at all exists between these indices. Also R² coefficients are relatively low. These results suggest that a simple mathematical formulation such as "(percent change in MCD)=1.3 X (percent change in GNP deflator)" does not accurately predict changes in future major weapon systems prices.

FIGURE 6

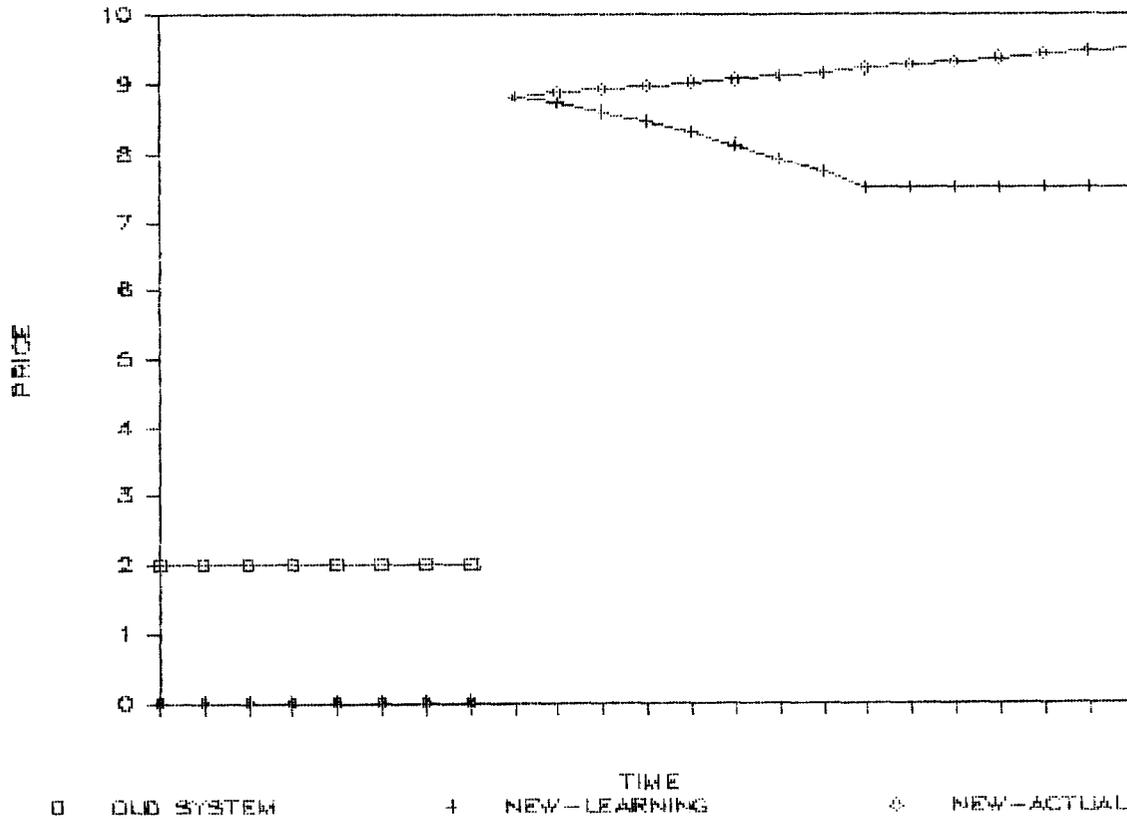
THE EFFECT OF LAGGED REPORTING ON
MEASUREMENT OF WEAPON SYSTEM PRICE CHANGES



The inability of these regressions to explain fluctuations in major weapon systems prices may be linked to problems in measuring such prices. Figures 6 and 7 illustrate two problems which complicate the measurement of weapon system prices. First, as shown in Figure 6, weapon systems prices are measured by the BEA based on the prices of weapon systems when they are actually delivered to DOD. Although prices are measured for the GNP deflator on the same delivery basis, weapon systems take much longer to build (on average) than do commodities in either the entire economy or the industrial sector specifically. Thus, recording changes in weapon systems prices may lag considerably behind recording price changes for other goods. In our own analysis, we found that current weapon systems price changes were more highly correlated with past changes in the GNP deflator ($r=.90$) than with current changes in the GNP deflator ($r=.52$). When inflation falls, this causes weapon system price increases to appear higher than other prices.

FIGURE 7

THE EFFECT OF LEARNING CURVE ASSUMPTIONS
ON THE MEASUREMENT OF WEAPON SYSTEM PRICE CHANGES



Second, measurement of weapon systems price changes depends heavily on index adjustments made when new weapon systems replace old outdated systems. Realizing that prices reported for initial versions of weapon systems are not representative of prices when production is fully underway, BEA analysts replace initial prices with base prices established in the contract documentation for the 100th unit produced. However, the contract documentation establishes those prices on the basis of price decreases assumed from efficiencies to be gained through "learning" or the "progress" curve. Our prior research (see GAO report, Underestimation of Funding Requirements in Five Year Procurement Plans, NSIAD-84-88) shows price decreases due to learning curves seldom occur in military weapon systems. The use of learning curves in predicting the base prices of a new weapon system therefore understates its actual price. Because a new weapon system's base price is the floor from which all

future inflation is measured, initial underpricing results in an overestimate of later inflation in the weapon system's price. (In our informal discussions with BEA on this point, they maintained that deviations from the learning curve price are based upon escalation agreements which are tied to measured indices of inflation, such as wage increases or changes in the PPI. Therefore, they maintained their measurements of weapon system inflation are not biased upward.)

FIGURE 8

ANALYSIS OF THE HISTORICAL RELATIONSHIPS BETWEEN THE PRICES OF DEFENSE PURCHASES (NONPAY AND NONFUEL) AND PRICES IN THE REST OF THE U.S. ECONOMY: FY 1978-84

Statistics	Changes in GNP Deflator	Changes in PPI-Industrial
Constant	2.043	5.733
t Statistic	1.128	4.891
Slope Coefficient	0.885	0.329
t Statistic	3.608	2.640
R ²	0.722	0.582
Durbin Watson Statistic	2.067	1.261

Neither the GNP nor the PPI-industrial index seems to provide good projections of major weapon systems prices over the period fiscal year 1978 through fiscal year 1984. We analyzed how well each index predicted the combined price of both weapon systems and all other defense purchases as reported by the DOD purchases deflator. This analysis showed that the prices of DOD purchases--including all other purchases and major weapon systems purchases but excluding pay and fuel--increased at about the same rate as prices of all goods in the U.S. economy. This conclusion is not inconsistent with major weapon systems' prices increasing more rapidly than other prices on a temporary basis.

However, if true, there must be some defense goods for which the prices are increasing slower than most other goods. If special inflation multipliers are used for goods where the prices are increasing relatively rapidly, then DOD budget authority is increased. Conversely, if special multipliers are used for those defense goods with relatively slow price growth, DOD budget authority is decreased from what it would be if projections of the GNP deflator had been used. Selection of only those goods with relatively high price growth for special budgeting treatment artificially increases the amount of resources devoted to defense programs.

FIGURE 9

ESTIMATED DIVIDENDS IN THE DEFENSE BUDGET DUE TO
INFLATION OVERESTIMATES BY APPROPRIATIONS TITLE AND FISCAL YEAR
(In billions of dollars)

Appropriation Title	FY1982	FY1983	FY1984	FY1985	FY1986	Total by Title
Military Personnel	\$0.10	\$0.22	\$0.18	\$0.12	\$0.01	\$0.63
Operations & Maintenance	1.75	2.84	2.65	1.52	0.05	8.81
Procurement	3.83	4.92	3.79	2.23	0.12	14.89
Research, Development Test & Evaluation	0.62	0.87	0.75	0.52	0.04	2.80
Military Construction	0.26	0.18	0.14	0.10	0.01	0.69
Fiscal Year Total	\$6.56	\$9.03	\$7.51	\$4.49	\$0.23	\$27.82

We defined the inflation dividend accruing due to inflation overestimates as the difference between the amount calculated as needed to cover projected future price increases when the budget was initially appropriated, and the amount which would have been set aside if budget decisionmakers had known then what they know now. Figure 9 shows our estimates--based on DOD data--of the size of the inflation dividend in each major appropriations title of the defense budget. These estimates do not include any dividend accruing due to use of a 1.3 multiplier for major weapon systems. Inflation savings in the category of pay for

military and civilian personnel, which are generally funded through supplemental appropriations, are not included. These estimates are somewhat lower than actually received by DOD because the TOA levels we used are the ones currently in effect, not those initially appropriated, which were slightly higher.

The largest inflation dividend occurred in the procurement appropriations title in fiscal year 1983. Using the inflation rates as projected in January 1982, \$19.6 billion was budgeted for future price growth. However, \$14.7 billion would have been necessary if actual inflation rates for fiscal years 1982 through 1984 and currently available projections for fiscal years 1985 through 1987 had been used when estimating inflation for the fiscal year 1983 procurement programs. The inflation dividend (the difference between \$19.6 billion and \$14.7 billion) is \$4.9 billion. Similarly, large inflation dividends have occurred in fiscal year 1982 (\$3.8 billion), 1984 (\$3.8 billion), and 1985 (\$2.2 billion). The inflation dividend for fiscal year 1986 is relatively small because inflation projections have decreased only slightly so far in 1985.

In the military personnel appropriations title, the largest annual dividend is \$220 million in fiscal year 1983. Two factors contribute to keeping the dividend for this area relatively small. First, these estimates do not include military pay. Only a small proportion of all military personnel funds cover nonpay expenses. Nonpay expenditures in the military personnel appropriations title cover such items as the transportation of the household goods of military members who are reassigned and the purchase of food for mess halls. Second, funds in the military personnel title which do pay for non-wage goods tend to be spent very quickly--virtually all within the fiscal year they are appropriated. Thus, changes in inflation rates have little chance to change very much or accumulate over time.

In the operations and maintenance title, the inflation dividend is \$2.8 billion for fiscal year 1983. This dividend does not include any changes in projected wages of civilian employees. (Civilian pay is funded under the operations and maintenance title in the defense budget.) The dividend comes from savings in fuel prices and all other operations and maintenance purchases. Fuel savings were particularly high in fiscal years 1983 and 1984 when DOD forecast fuel price increases of 2 and 5 percent, respectively. Instead there were price declines of 10 and 9 percent. Savings are relatively small in fiscal year 1986 because inflation projections for nonfuel purchases changed only slightly from January 1985 to April 1985 (the latest revision available in the budgetary cycle) and because there has been no revision in projected fuel prices.

In the research, development, test, and evaluation (RDT&E) appropriations title, funds purchase both fuel--subject to special fuel deflator projections--and research and development services--subject to the regular GNP deflator projections. Unlike operations and maintenance and like the procurement title, RDT&E programs do not have to be obligated in the fiscal year of the original appropriation. Therefore, spendout rates in this title cover the original fiscal year of the appropriation and three additional fiscal years. The largest inflation dividend occurred in fiscal year 1983 when it was \$870 million.

Funds for military construction do not have to be obligated within the year of the original appropriations, and spendout rates are projected for 4 years after the fiscal year of the original appropriations. Even though inflation planning is an important part of the military construction appropriations, total appropriations are relatively small and therefore the inflation dividend is also relatively small. The highest inflation dividend, \$260 million, occurs in fiscal year 1982.

We estimate that the inflation dividend due to overestimates in all appropriations titles for fiscal year 1982 and fiscal year 1985 has been \$27.8 billion. Over half of the dividend, about 54 percent, has occurred within procurement appropriations. The largest dividend occurred in fiscal year 1983. The current fiscal year's dividend is estimated to exceed \$4 billion. The dividend for fiscal year 1986 is quite small because it represents changes in inflation expectations which occurred over an extremely short period--January 1985 to April 1985.

As you can see in the next figure, the procurement appropriations title is the largest source of inflation savings. It is a relatively large account, \$107 billion in fiscal year 1986, and its programs take the longest of any in the defense budget to complete--incurring substantial inflation price increases over the life of its programs. Figure 10 separates the inflation dividend between that accruing to major weapon systems (the largest portion of Defense procurement spending) and nonmajor systems. Not shown in this figure are dividends resulting from the use of an added 30 percent in estimating inflation for major weapon systems.

FIGURE 10

ESTIMATED SIZE OF INFLATION DIVIDEND FOR PROCUREMENT

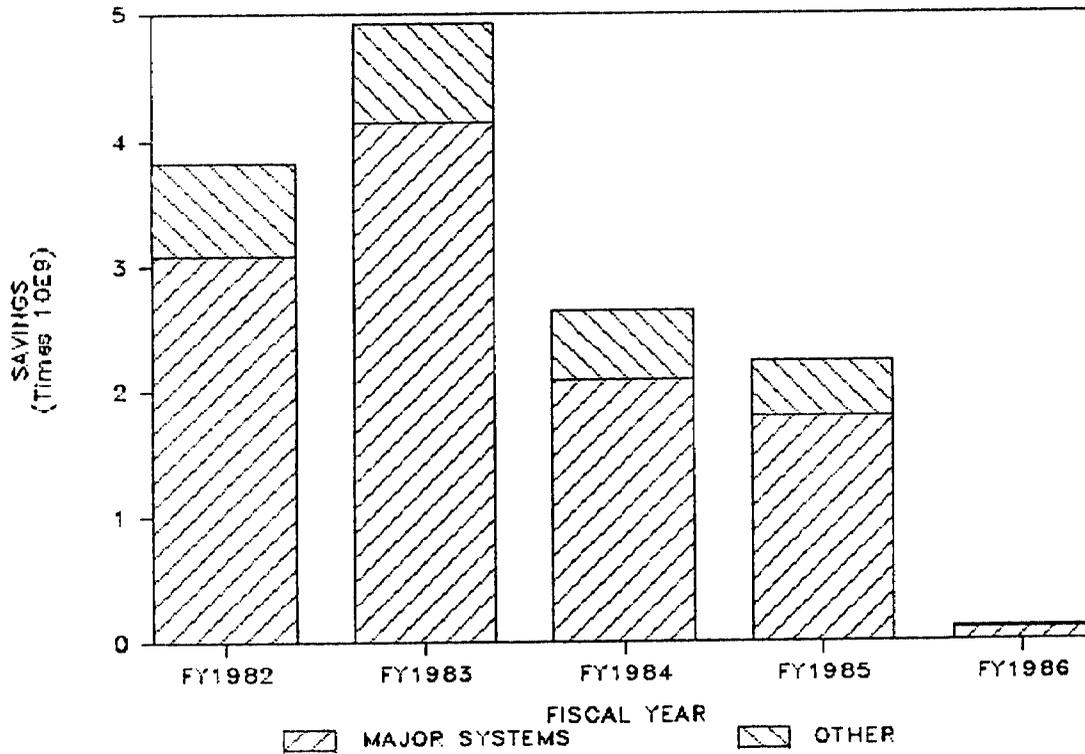


FIGURE 11

ESTIMATED INFLATION DIVIDENDS IN DOD BUDGETS
(in billions of dollars)

Fiscal Year	Due to Overestimates of Inflation	Due to Use of 1.3 Multiplier	Total
1982	\$ 6.6	\$0.0	\$ 6.6
1983	9.0	3.3	12.3
1984	7.5	2.8	10.3
1985	4.5	3.1	7.6
Total	\$27.6	\$9.2	\$36.8

If, as we believe, the use of a 1.3 multiplier is not needed to compensate DOD fully for weapon systems inflation, its use over the period fiscal year 1983 through fiscal year 1985 is itself an inflation dividend. If prior fiscal years appropriations were adjusted on the assumption that major weapon systems inflation was budgeted at a rate equal to projected changes in the GNP deflator, an additional \$9.2 billion would have been saved. As shown in figure 11, when combined with the previous estimate of \$27.6 billion, the result is a total inflation dividend of \$36.8 billion.

The implications of these results for fiscal year 1986 budget decisions must be interpreted with some caution. First, some of these funds have already been cut from DOD budgets by congressional action. DOD estimates that \$8.2 billion of this dividend has been cut by Congress as a result of budget repriceings (such as was performed in this analysis) or realized contract savings. Second, many of these funds are no longer available to DOD for use on current defense programs and thus are not substitutable for fiscal year 1986 appropriations. This is true of all inflation dividends in the military personnel and operations and maintenance appropriations titles for all years except fiscal year 1986. Also, because in the other appropriations titles most appropriations must be obligated within 3 years, inflation dividends for fiscal years 1982 and 1983 are no longer available for use by DOD. Thus, much of the inflation dividend has either been spent on additional defense programs, been reprogrammed (see appendix VIII), or has lapsed (see appendix VII).

Although seemingly quite large, our estimate of the defense inflation dividend is quite similar to both that of DOD and that of the Military Reform Caucus. Figure 12 displays these comparisons. In his estimate of an inflation dividend of \$61.7 billion, Secretary Weinberger includes reductions which occurred prior to congressional appropriations and during budget reviews internal to the administration. If this amount (\$33.3 billion) is subtracted from his estimate, the remainder (\$28.4 billion) compares to, and in fact is even larger than, our estimate.

The Military Reform Caucus uses a very different method of calculation to estimate an inflation dividend of between \$42 billion and \$54 billion. The range of estimates results from their suggestion of two possible alternative indices for budgeting for inflation in defense purchases--the PPI for manufacturing and the PPI for durable manufacturing. Two factors differentiate the Military Reform Caucus estimate from our estimate. The Military Reform Caucus estimate includes a compounding effect of inflation dividends; the GAO estimate

does not. Our estimate includes inflation savings in fuel purchases; the Military Reform Caucus estimate does not. When both estimates are reduced to a common base, our estimate compares to the Military Reform Caucus estimates.

FIGURE 12

COMPARISON OF GAO ESTIMATE WITH ALTERNATIVE
ESTIMATES OF DEFENSE INFLATION DIVIDEND

ITEM	DOD	Military Reform Caucus
Source	OASD (Comptroller)	Military Reform Caucus
Expenditure base	All nonpay purchases	All nonpay and nonfuel purchases
Time period	FY 1982-85	FY 1982-85
Alternative estimate	\$28.4 billion ^a	\$19.7-24.1 billion
GAO estimate	\$27.6	\$22.8 ^b
^a DOD identified \$61.7 billion in total savings, but \$33.3 billion occurred prior to congressional appropriations.		
^b GAO estimated dividend due to lower fuel prices as \$4.8 billion.		

Because a substantial fraction of the inflation dividend estimated by the Military Reform Caucus stemmed from its assumption that prior year dividends compounded, we analyzed whether such an assumption is reasonable (see figure 13). The Military Reform Caucus argues that once a dividend accrues to DOD in one year, this dividend, unless cut from the budget by Congress, becomes a base from which later defense budgets are set. Basic to this argument is an assumption that decisions on annual defense budgets are made incrementally--Congress first accepting inflation adjustments in the prior year budget, then deliberating over real increases for new defense appropriations.

FIGURE 13

THE IMPACT OF THE INFLATION DIVIDEND
ON REAL GROWTH IN THE DEFENSE BUDGET

Item	FY 1982	FY 1983	FY 1984	FY 1985
<u>TOA Levels</u> (in billions)				
Original appropriation	\$214.2	\$240.5	\$259.1	\$285.3
Current appropriation	210.4	238.7	258.2	285.3
<u>Originally Intended Real Growth</u> (in percents)				
Fiscal year inflator	8.9%	6.3%	3.7%	4.5%
Real growth	12.2	7.5	4.7	5.7
Cumulated real growth	12.2	20.6	26.3	33.5
<u>Actual Real Growth^a</u> (in percents)				
Fiscal year inflator	6.8%	4.1%	3.3%	4.1%
Real growth	14.4	9.8	5.1	7.0
Cumulated real growth	14.4	25.6	32.0	40.1

^aBased on current projections of inflation as of April 1985.

While we accept the principle of compounding as advanced by the Military Reform Caucus, we question the estimates of the Military Reform Caucus as to its size. The Military Reform Caucus assumes that the entire inflation dividend from one fiscal year compounds in the next fiscal year. This is not the case. In fact, DOD uses only portion of any inflation dividend when adjusting a prior year defense budget for inflation changes. In brief, these two concepts differ because the full inflation dividend accrues to a particular fiscal year's appropriations over a 5-year period. The inflation adjustment used in calculating real growth in a defense budget covers only a single year of this 5-year period.

Figure 13 presents our own estimation of the compounding effect of overestimates of future inflation. In order to focus attention on the issue of decisions about real growth in the defense budget, this figure presents results in terms of cumulated real growth since fiscal year 1981, not dollar amounts. The first two rows of Figure 13 show the originally appropriated levels of TOA in the defense budget and currently approved TOA levels. The next three rows show the originally projected fiscal year inflator estimate used in determining that fiscal year's "zero real growth" base for budget deliberations, the approved real growth in that year, and the cumulated real growth using fiscal year 1981 as a base. Using the adjusted base for zero real growth in each fiscal year, approved levels of real growth can be calculated.

Following is an example of how these figures would be used. The TOA level for FY 1981 was \$175.3 billion. Originally, it was estimated a constant level of defense program for fiscal year 1982 would require \$190.9 billion, equal to \$175.3 billion times one plus the adjustment factor of 8.9 percent. The realized real growth for fiscal year 1982 is 12.2 percent, the difference between the adjusted fiscal year 1982 base of \$190.9 billion and the approved TOA of \$214.2 billion.

In performing these calculations, we assumed that all cuts in a fiscal year's TOA levels occurred before deliberations for the succeeding fiscal year's budget and that all such cuts stemmed purely from congressional desire to adjust for previous inflation dividends. Thus, the approved level of real growth for a fiscal year depends on the original TOA level of that fiscal year and the currently approved TOA level of the previous fiscal year.

Because incorrect fiscal year inflators were used for fiscal years 1982 through 1985, DOD realized significantly higher levels of real growth than Congress originally intended in its budget decisions. These higher levels of real growth are shown in the last three rows of figure 13. When cumulated, Congress' original intentions over the period would have permitted a real growth of 33.5 percent of fiscal year 1981 defense program levels. Due to overestimates of inflation, DOD may have realized a real growth of as much as 40.1 percent over this same period.

UNOBLIGATED BALANCES AND LAPSED FUNDS (LAPSES)OBJECTIVE, SCOPE, METHODOLOGY

Our objective was to compare actual obligation rates against DOD rates to determine how accurately DOD estimates its unobligated balances and lapses.

We could not obtain monthly obligation plans. We did, however, obtain aggregate data on the total amount of budget authority that DOD estimated it could obligate, and data on the amount of budget authority which DOD actually obligated.

We compared DOD projections of unobligated balances and obligations against DOD's end-of-year actual obligations, unobligated balances, and lapsing funds for years 1955 through 1985 to date. While this analysis does not identify the amount to cover full funding and contingencies, our analyses is an attempt to approximate requirements. We estimated the funds that are unlikely to be obligated as planned. This estimate is the difference between estimated unobligated balances and DOD's actual lapsing balances. (DOD does not plan for lapsing balances.) We used the current year estimate of year-end unobligated balances because this estimate takes into account congressional reductions in budget authority and was the most recently available estimate. We also compared actual levels of unobligated balances and lapses with historical trends.

We obtained data from DOD on levels of available authority (new and old budget authority and reimbursables), obligations, unobligated funds, and lapsed authority. This data included projected and actual values disaggregated to the appropriation account level. We also obtained OMB data on aggregate levels of new budget authority and unobligated funds.

We used the Box-Jenkins, or ARIMA, analysis to generate historical trend models of unobligated balances and obligations. The unobligated balances model was generated from DOD's unobligated balances during the period fiscal year 1952 to fiscal year 1981. DOD's monthly obligations were modeled as a share of DOD total available authority between fiscal year 1979 and April 1985. The particular statistical tool chosen for the analysis was the Box-Jenkins procedure. Box-Jenkins Time Series Analysis is a management analysis tool which can be used to forecast for planning purposes. Since it predicts by identifying a pattern of past movements, time series analysis provides a useful description of historical data, but cannot explain why the data behaves as it does. The technique is useful, however, for indicating systematic patterns.

FIGURE 1

DOD UNOBLIGATED BALANCES AND NONPAY TOA
(Current Year \$ in billions)

	<u>Fiscal Years</u>			
	1981	1982	1983	1984
Unobligated balances, military ^a	\$26.5	\$34.6	\$43.4	\$51.6
Nonpay TOA ^b	100.9	126.6	149.3	164.4
Percent ^c	26.3%	27.3%	29.1%	31.4%

Sources:

^aOffice of Assistant Secretary of Defense (Comptroller), OASD(C), National Defense Budget Estimates for fiscal year 1986, p.64.

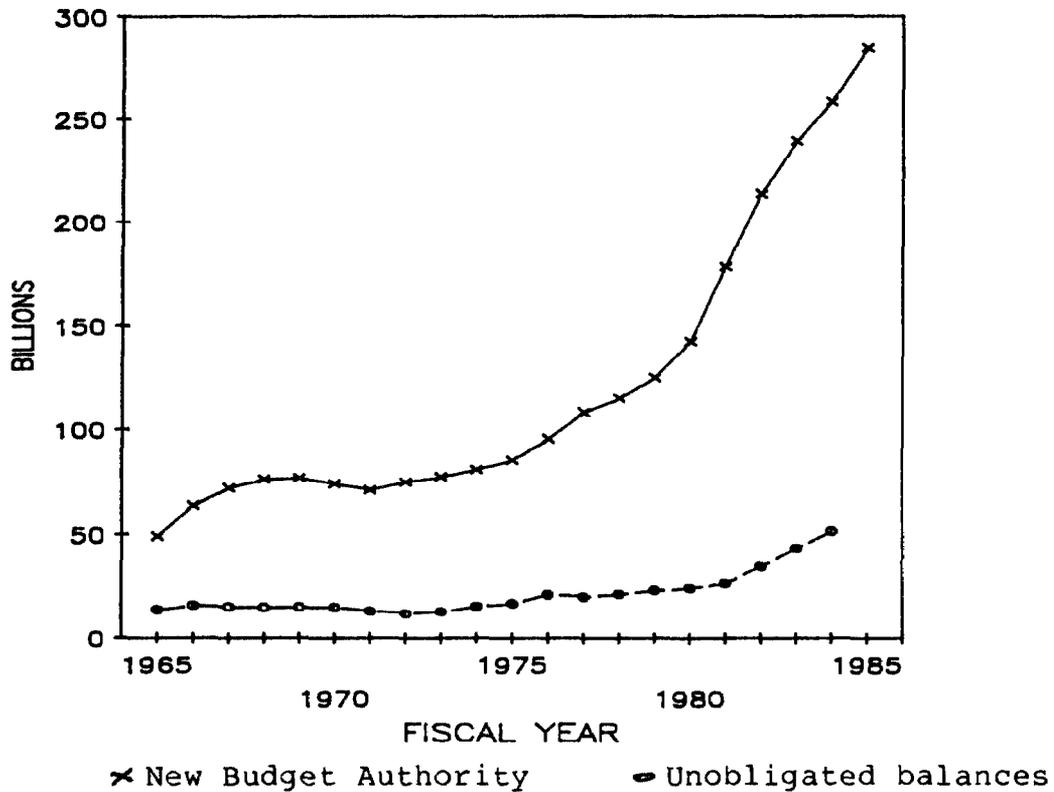
^bOMB, Budget of the U.S. Government--Fiscal Years 1981-84.

^cUnobligated balances divided by nonpay TOA.

Figure 1 shows that the percent of nonpay TOA which is unobligated has been steadily rising in recent years. (Nonpay TOA is TOA less the cost of salaries and benefits.) Unobligated balances have risen faster than the budgets of DOD programs.

FIGURE 2

COMPARISON OF UNOBLIGATED BALANCES^a AND DOD
BUDGET AUTHORITY^b



Sources:

^aOASD(C), "National Defense Budget Estimates for FY 1986."

^bOMB "Budget of the U.S. Government," various fiscal years.

DOD's unobligated balances from fiscal year 1982 to fiscal year 1984 were higher than historical trends would indicate these levels should be. Figure 2 shows that unobligated balances for fiscal year 1955 through fiscal year 1981 were relatively stable despite the 6 fold increase in DOD budget authority. However, an ARIMA analysis of the unobligated balances between fiscal years 1952 and 1980 projects DOD's unobligated balances at about \$16.2 billion per year during the early 1980's.

FIGURE 3

DOD UNOBLIGATED BALANCES COMPARED TO HISTORICAL TRENDS
(Current Year \$ in billions)

<u>Fiscal year</u>	End of year <u>actual^a</u>	<u>Historical trend^b</u>	<u>Difference</u>
1981	\$26.5	\$16.2	\$10.3
1982	34.6	16.2	18.4
1983	43.4	16.2	27.2
1984	51.6	16.2	35.4

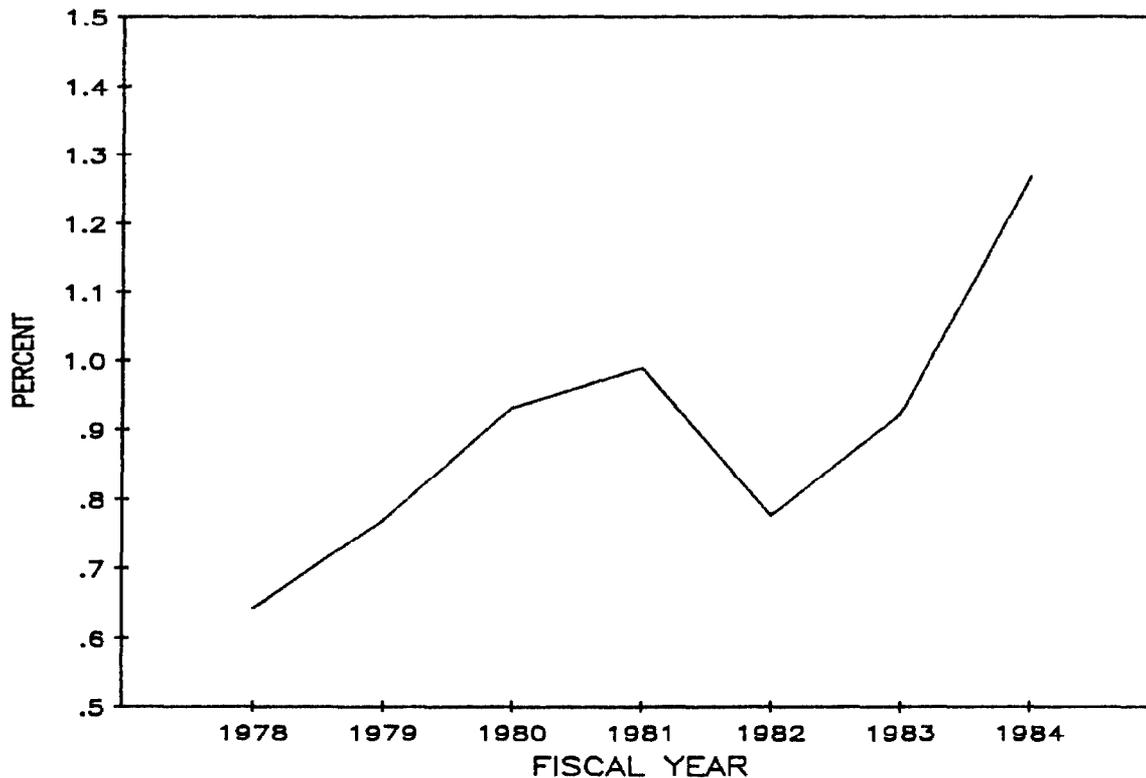
Sources:

^aOMB, Budget of the U.S. Government--Fiscal Year 1981-84.

^bCalculated by ARIMA based on data for fiscal years 1952-80.

The level of unobligated balances nearly doubled from \$26.5 billion in fiscal year 1981 to \$51.6 billion in fiscal year 1984. It is important to note that the difference between the actual unobligated balances and the levels one would expect from historical trends reached \$35.4 billion in fiscal year 1984. In other words, actual unobligated balances are more than three times the historical trend (based on the ARIMA model.)

FIGURE 4

PERCENT OF LAPSES^a TO NEW BUDGET AUTHORITY^b

Sources:

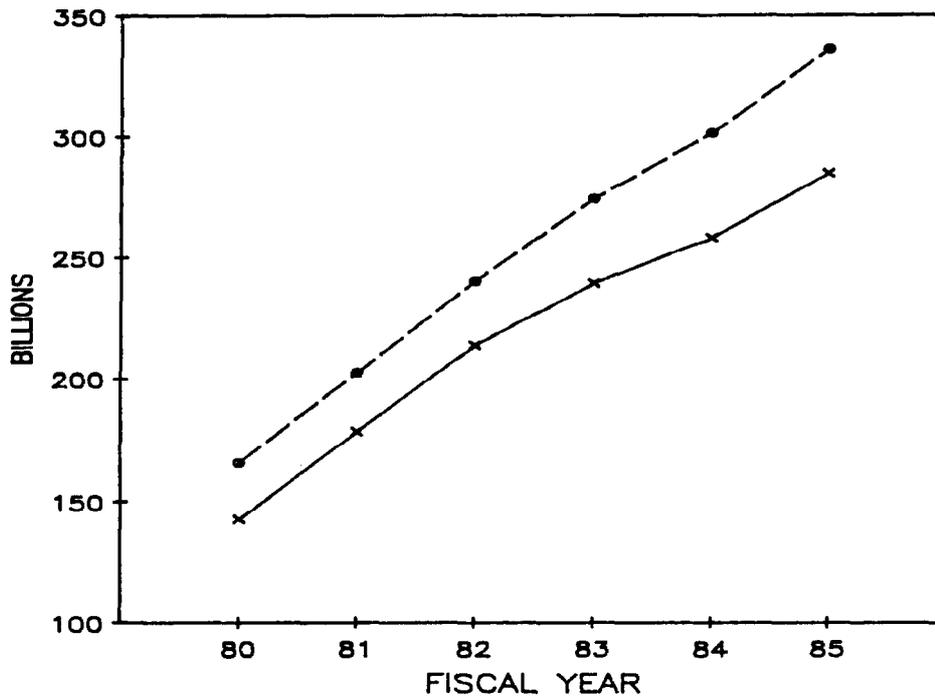
^aOASD(C), P&FC, "Department of Defense Lapses by Title and by Military Function," Dec. 27, 1984.

^bOASD(C), "National Defense Budget Estimates for FY 1986," p. 86.

Budget authority lapses if it is not used before the relevant statutory deadline. Although the lapsed share of budget authority rose and fell between fiscal years 1978 and 1982, lapses increased rapidly from fiscal year 1982 through fiscal year 1984. Figure 4 illustrates how the share of lapses in new budget authority rose from 0.64 percent in fiscal year 1978 to 1.28 percent in fiscal year 1984.

FIGURE 5

COMPARISON OF NEW BUDGET AUTHORITY TO
TOTAL AVAILABLE AUTHORITY



• Total Available Authority × Budget Authority

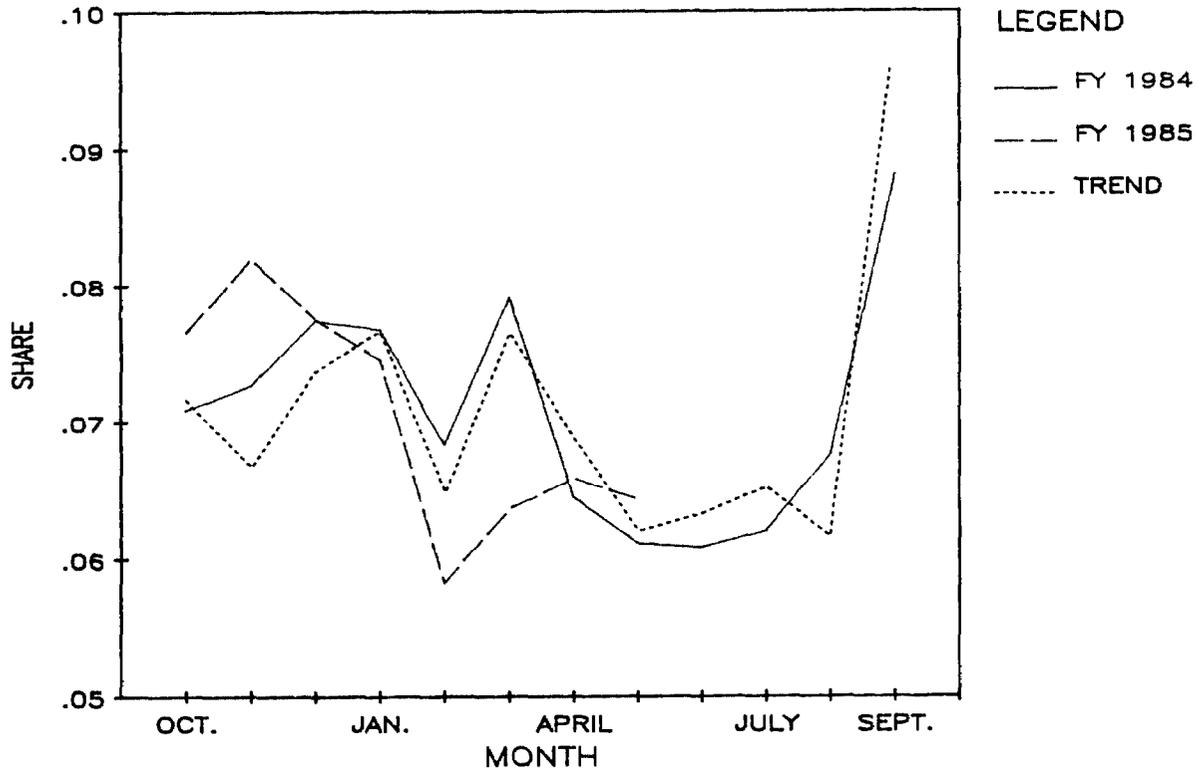
Source:

OASD(C), "National Defense Budget Estimates for FY 1986,"
p. 86.

The previous figures illustrated that DOD's unobligated balances have grown and that some of these unobligated funds have lapsed. At the beginning of any fiscal year, DOD's total available authority includes the previous year's unobligated balances, the new budget authority and reimbursables. Figure 5 shows the growth over the last 3 years in DOD's total available authority relative to the growth in new budget authority provided by the Congress.

FIGURE 6

PATTERNS OF MONTHLY OBLIGATIONS



Source:

OASD(C), "Financial Summary Tables 738 and 746," various fiscal years.

We gathered data on DOD obligations and generated monthly rates of obligations. These shares were defined as the monthly obligations divided by DOD's measure of total available authority in the respective fiscal year. After using ARIMA to analyze the pattern of obligations, we compared actual obligation rates from fiscal year 1984 through the first 8 months of fiscal year 1985 with the historical pattern of monthly obligations.

In Figure 6, the dashed line represents the pattern of monthly obligations. From April through August obligations are lower. In September, DOD obligates the largest share of available authority. As shown, in fiscal year 1984, obligations followed the historical pattern. In fiscal year 1985, DOD is obligating approximately in line with the historical pattern.

FIGURE 7

COMPARISON OF ACTUAL AND PLANNED UNOBLIGATED
BALANCES AND LAPSES
(Current Year \$ in billions)

	Fiscal Years			
	1984		1985	
	Total	Procurement	Total	Procurement
Actual	\$57.89	\$43.59	\$64.92 ^a	\$51.92 ^a
Planned	43.83	35.45	51.59	40.10
Difference	14.06	8.14	13.33	11.82

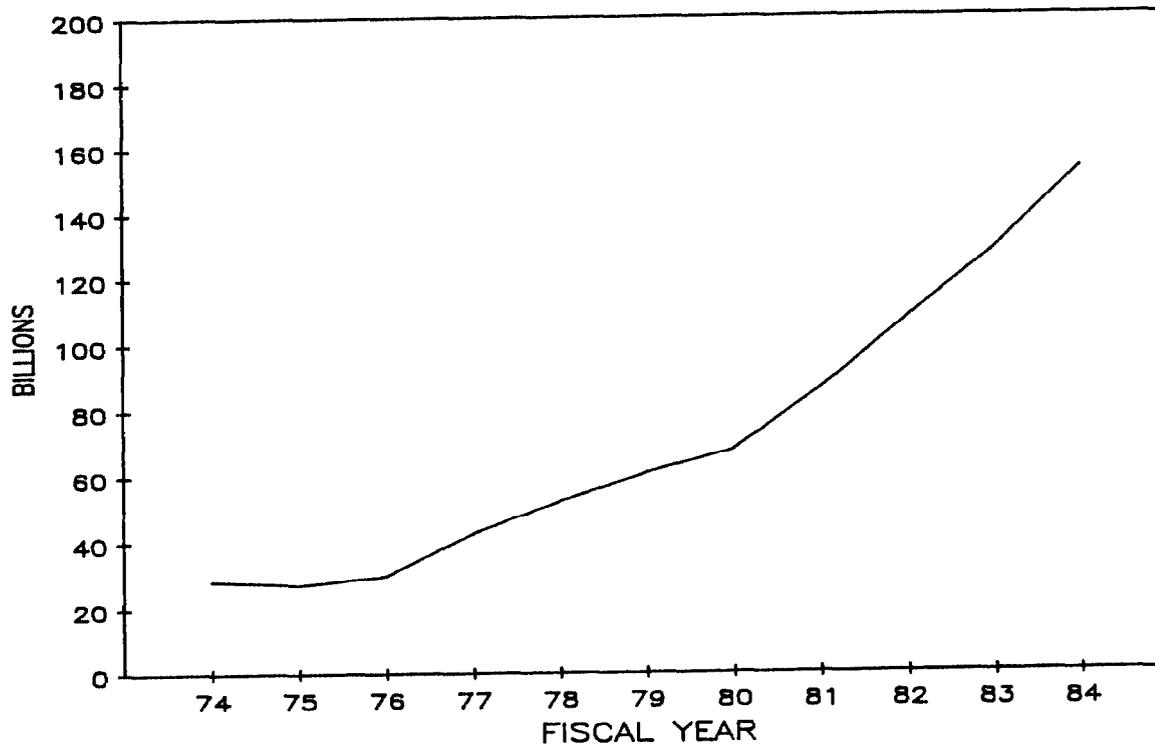
Note:

^aEstimated from May through end of fiscal year 1985 based on ARIMA model.

Although DOD had planned to increase obligation rates, it has been obligating available authority in line with historical trends. As a result, DOD has had larger unobligated funds and lapses than forecasted in the current year budgets for fiscal years 1984 and 1985. Figure 7 illustrates the overall size of the underestimates for the procurement appropriations title. In fiscal year 1985, if historical trends continue, DOD will have \$13.3 billion more in unobligated funding than was estimated in the fiscal year 1986 budget. About \$11.8 billion of the underestimate will be in the procurement title.

FIGURE 8

OBLIGATED BALANCES OVER THE LAST TEN YEARS
(current year \$ in billions)



Source:

OMB, "Budget of the U. S. Government," various fiscal years.

Obligations that are not paid by the end of the year are unliquidated obligations and are recorded as DOD's obligated balances. These balances will result in payments (or outlays) in future fiscal years. As can be seen in Figure 8, obligated balances have grown steadily over the last 10 years.

ANALYSIS OF DOD REPROGRAMING ACTIONS
FISCAL YEARS 1980 THROUGH 1985

OBJECTIVES, SCOPE, AND METHODOLOGY

We analyzed reprogramming actions by DOD in fiscal years 1980 through 1985¹ to determine

- dollar value and volume of all proposed reprogramming actions,
- reasons funds were to be reapplied or made available for reapplication,
- if there were any significant changes in the purposes for which funds became available or were reapplied,
- if funds being reapplied were potentially in excess of original requirements or were being used for higher priority programs.

We reviewed legislation, regulations, and DOD directives, instructions, and guidance relating to reprogramming and transfer authority. A defense budget analyst from Congressional Research Service (CRS) provided special assistance in gathering and analyzing reprogramming data.

We developed and analyzed a comprehensive data base of above-threshold reprogramming actions submitted to Congress in fiscal years 1980-85 (\$10.1 billion, or about 40 percent of total reprogramming dollar value). We did not include in our analysis below-threshold actions because of the magnitude of actions and nonavailability of information on the nature and purpose of these actions. We also excluded from our data base internal reprogrammings because of time constraints. We examined only actions covered under the DOD appropriations acts, excluding military construction and DOD-related nuclear work covered under Department of Energy appropriations acts.

We selected above threshold reprogramming actions for in-depth analysis because these actions provided readily available, documented information which addressed our key objectives.²

¹All actions submitted to Congress through July 30, 1985.

²The formalized process DOD uses to submit reprogramming requests to Congress is DD Form 1415, "Reprogramming Action." See figure 19.

We examined 477 above-threshold actions. Each action was broken down according to DOD serial number, fiscal year of action, functional title, DOD department, appropriations account, purposes for which funds were being reapplied and reasons why funds were made available for reapplication, and whether the funds being reprogramed require future reinstatement.

We assigned each variable a numeric value based upon the data contained in the reprogramming action. We sometimes made judgments about the reasons given for an action if the reason was not explicitly or clearly stated. In many instances, DOD did not specify whether reinstatement was needed as required in DOD Directive 7250.10. In those cases, we made a judgment based on the reasons given for the availability of funds. For example, we classified a "contract savings" as not requiring future reinstatement of funds. We made no attempt to validate DOD's stated reasons or whether funds were reinstated.

We used microcomputers and LOTUS 1-2-3 software and a main-frame computer using statistical analysis software to construct a data base and to manipulate and analyze reprogramming data. In a sample of our data, coding and entry errors were less than 2 percent. Our analysis focused on above-threshold reprogramming actions. Therefore, observations, findings, or conclusions cannot be generalized to below-threshold or internal reprogramming actions.

FIGURE 1

DOD REPROGRAMING ACTIONS APPLICABLE TO THE DOD APPROPRIATION ACTS FY 1980 - 1985* (Millions of Dollars)							
	FY 80	FY 81	FY 82	FY 83	FY 84	FY 85	TOTAL
ABOVE THRESHOLD							
Prior Approval	\$918	\$350	\$1,239	\$1,837	\$1,182	\$1,573	\$7,099
Notification	\$299	\$579	\$442	\$691	\$462	\$608	\$3,081
TOTAL	\$1,217	\$929	\$1,681	\$2,528	\$1,644	\$2,181	\$10,180
BELOW THRESHOLD							
TOTAL	\$1,004	\$1,400	\$2,399	\$1,706	\$1,791	\$1,125	\$9,425
INTERNAL REPROGRAMINGS							
TOTAL	\$757	\$1,003	\$993	\$988	\$900	\$1,858	\$6,499
ALL REPROGRAMING TYPES							
TOTAL	\$2,978	\$3,332	\$5,073	\$5,222	\$4,335	\$5,164	\$26,104

*FY 1985 data covers the 10-month period October 1984 through July 1985.

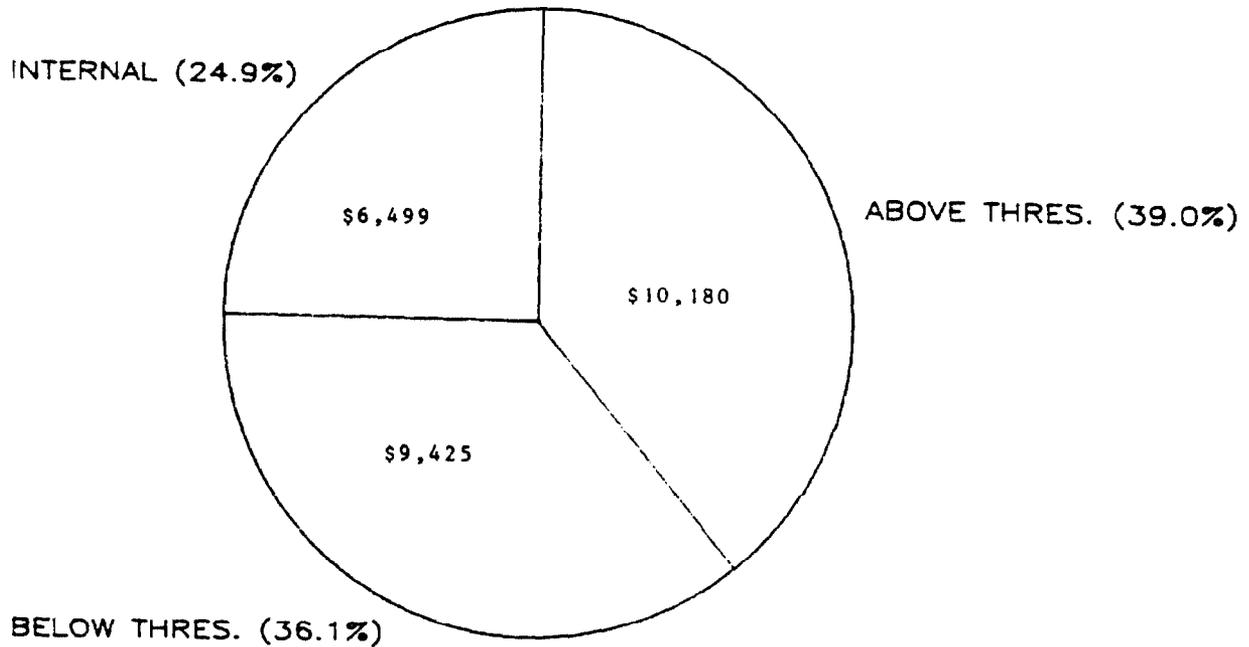
Figure 1 displays the dollar value of the three types of reprogramming actions by fiscal year from 1980 through 1985. The dollar amount of reprogramming action increased from \$3 billion in fiscal year 1980 to \$5.1 billion in fiscal year 1985. The sum of all reprogramming actions over this period is \$26.1 billion.

FIGURE 2

DISTRIBUTION OF REPROGRAMINGS

FISCAL YEARS 1980 - 1985*

(000 omitted)



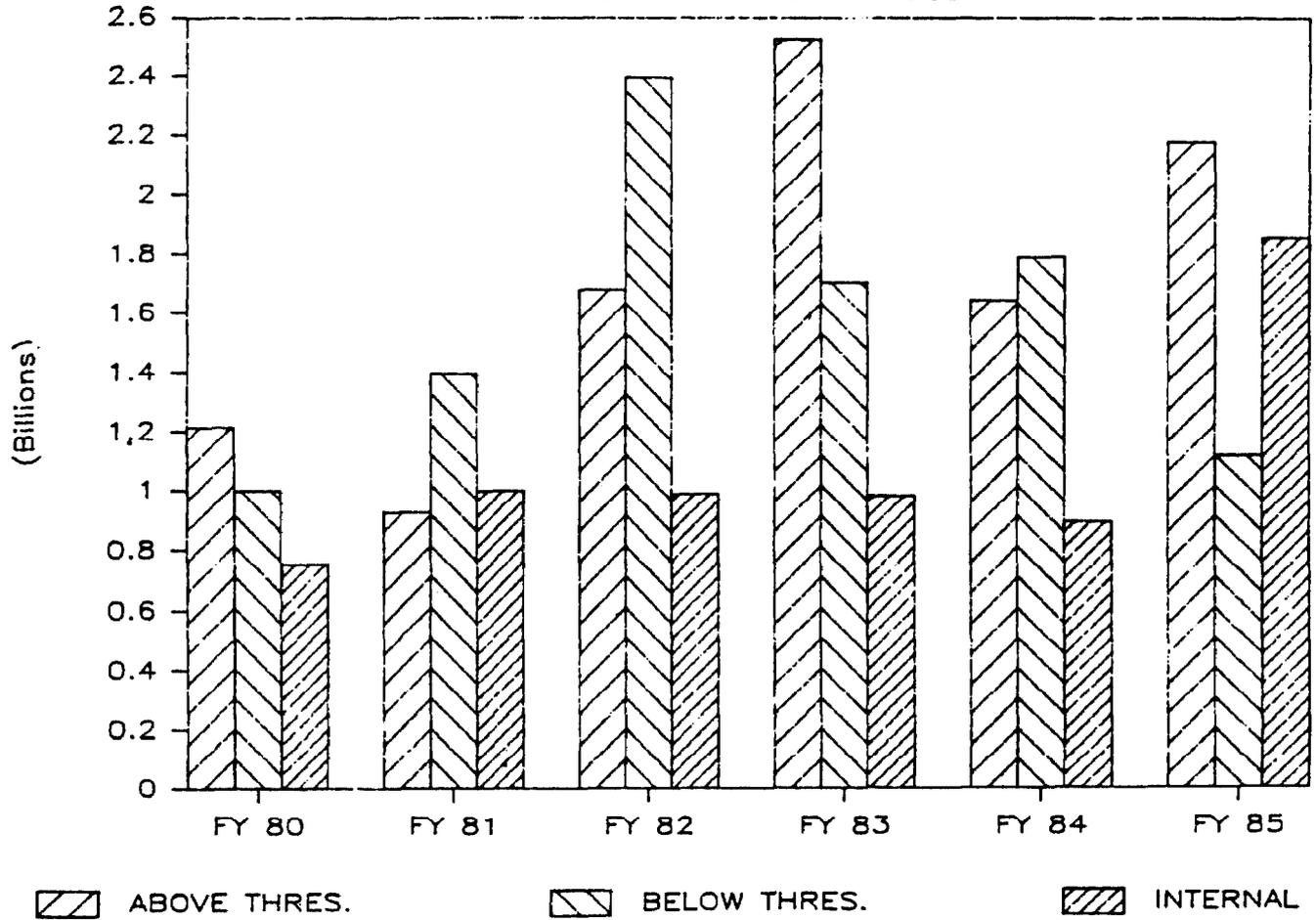
*FY 1985 data covers the 10-month period October 1984 through July 1985.

Figure 2 shows that the dollar values of above-threshold and below-threshold actions are about the same, comprising 39 and 36 percent, respectively, of the total dollar value of all reprogramming actions over the period analyzed. Internal reprogramming actions over this period amount to \$6.5 billion--about 25 percent of the total. Our analysis of reprogramming actions focused on above-threshold actions.

FIGURE 3

DISTRIBUTION OF REPROGRAMINGS

FISCAL YEARS 1980 - 1985*



*FY 1985 data covers the 10-month period October 1984 through July 1985.

Figure 3 shows reprogramming actions from FY 1980 through FY 1985 by year and by reprogramming category--above-threshold, below-threshold, and internal. As the data show, internal reprogrammings remained relatively constant from fiscal year 1980 through fiscal year 1984. In fiscal year 1985, the value of internal reprogramming actions was double the amount experienced in previous years.

FIGURE 4

DOD REPROGRAMING ACTIONS APPLICABLE TO THE DOD APPROPRIATION ACTS FY 1980 - 1985* (Numbers of Actions)							
	FY 80	FY 81	FY 82	FY 83	FY 84	FY 85	TOTAL
ABOVE THRESHOLD							
Prior Approval	52	25	44	60	70	63	314
Notification	19	26	31	33	26	28	163
TOTAL	71	51	75	93	96	91	477
BELOW THRESHOLD							
TOTAL	973	1300	1597	1020	1112	712	6714
INTERNAL REPROGRAMINGS							
TOTAL	23	21	17	16	19	22	118
ALL REPROGRAMING TYPES							
TOTAL	1067	1372	1689	1129	1227	825	7309

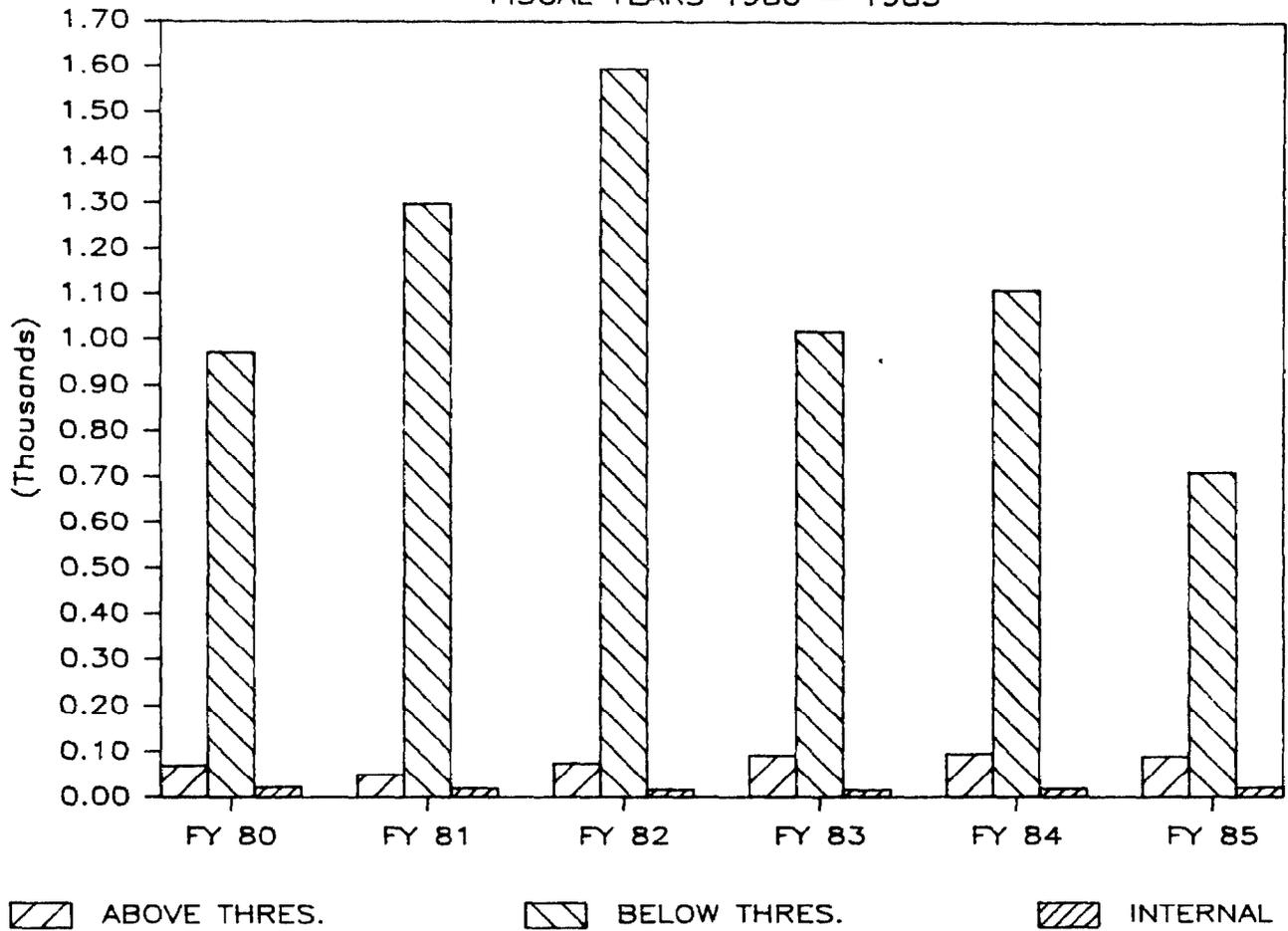
*FY 1985 data covers the 10-month period October 1984 through July 1985.

Figure 4 displays the number of actions for the three types of reprogramming actions by fiscal year from 1980 through 1985. Below-threshold actions represent the largest quantity, while internal reprogramming actions represent the smallest.

FIGURE 5

DISTRIBUTION OF REPROGRAMING ACTIONS

FISCAL YEARS 1980 - 1985*



*FY 1985 data covers the 10-month period October 1984 through July 1985.

Figure 5 displays the three types of reprogramming actions by fiscal year and number of actions. Below-threshold reprogrammings represent the most significant number of reprogramming actions; however, as noted in figure 3 their total dollar value is smaller than above-threshold actions.

FIGURE 6.
REPROGRAMING NET GAINS & LOSSES BY TITLE
(000 OMITTED)

TITLE	FY 80	FY 81	FY 82	FY 83	FY 84	FY 85*	TOTAL
MILITARY PERSONNEL	\$278,758	(\$60,460)	\$135,675	\$665,300	(\$8,900)	\$135,465	\$1,145,838
RETIRED MILITARY PERSONNEL	(\$29,212)	\$0	(\$10,000)	\$0	\$0	\$0	(\$39,212)
OPERATION AND MAINTENANCE	\$52,606	(\$29,340)	(\$15,675)	\$34,725	\$76,320	\$72,900	\$191,536
PROCUREMENT	(\$366,883)	(\$21,679)	(\$402,093)	(\$915,593)	(\$317,870)	(\$665,830)	(\$2,689,948)
RESEARCH, DEVELOPMENT, TEST AND EVALUATION	\$64,731	\$111,479	\$292,093	\$215,568	\$250,450	\$457,465	\$1,391,786

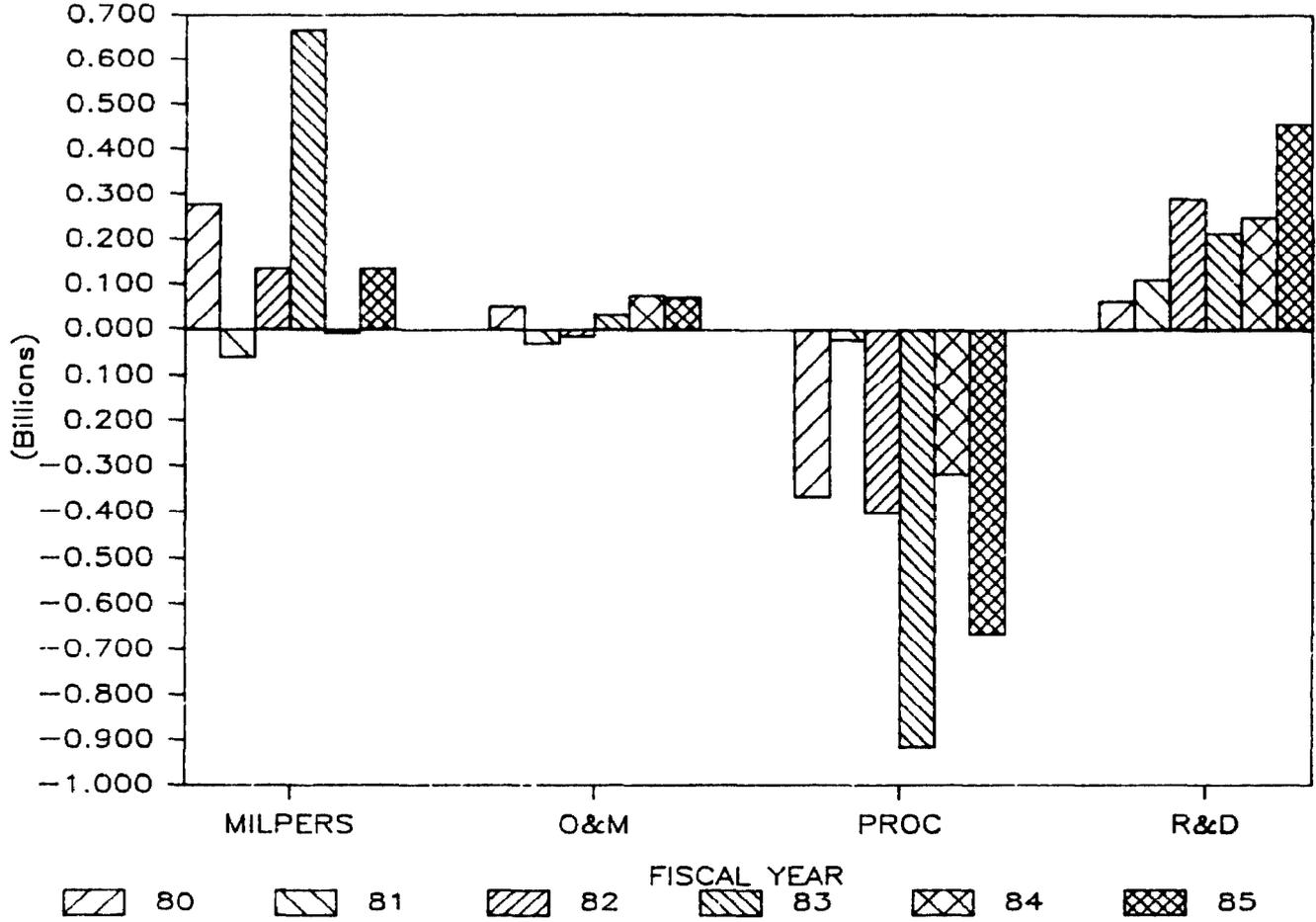
*FY 1985 data covers the 10-month period October 1984 through July 1985.

Figure 6 shows which accounts gained and lost funds during fiscal year 1980 through 1985. Procurement accounts lost funds in every year (a total of \$2.7 billion over the period), while RDT&E accounts realized net gains in almost every year rising from almost \$65 million in fiscal year 1980 to almost \$460 million in fiscal year 1985.

FIGURE 7

REPROGRAMING GAINS & LOSSES

NET CHANGE IN FUNCTIONAL TITLES



*FY 1985 data covers the 10-month period October 1984 through July 1985.

Figure 7 graphically displays the consistent use of procurement accounts as a source of funds over the 6-year period. It also shows that military personnel and RDT&E accounts were consistent beneficiaries, although the military personnel account has sustained random increases.

FIGURE 8.
REPROGRAMING NET GAINS AND LOSSES BY SERVICE
(000 OMITTED)

SERVICE	FY 80	FY 81	FY 82	FY 83	FY 84	FY 85*	TOTAL
NAVY	\$4,592	\$34,600	(\$36,207)	(\$13,293)	(\$3,305)	(\$57,643)	(\$71,256)
ARMY	(\$6,899)	\$0	(\$78,301)	(\$55,970)	(\$43,400)	\$10,714	(\$173,856)
AIR FORCE	(\$12,771)	\$10,900	(\$9,292)	(\$66,746)	(\$10,195)	(\$4,371)	(\$92,475)
DEFENSE AGENCIES	\$15,078	(\$45,500)	\$123,800	\$136,009	\$56,900	\$51,300	\$337,587

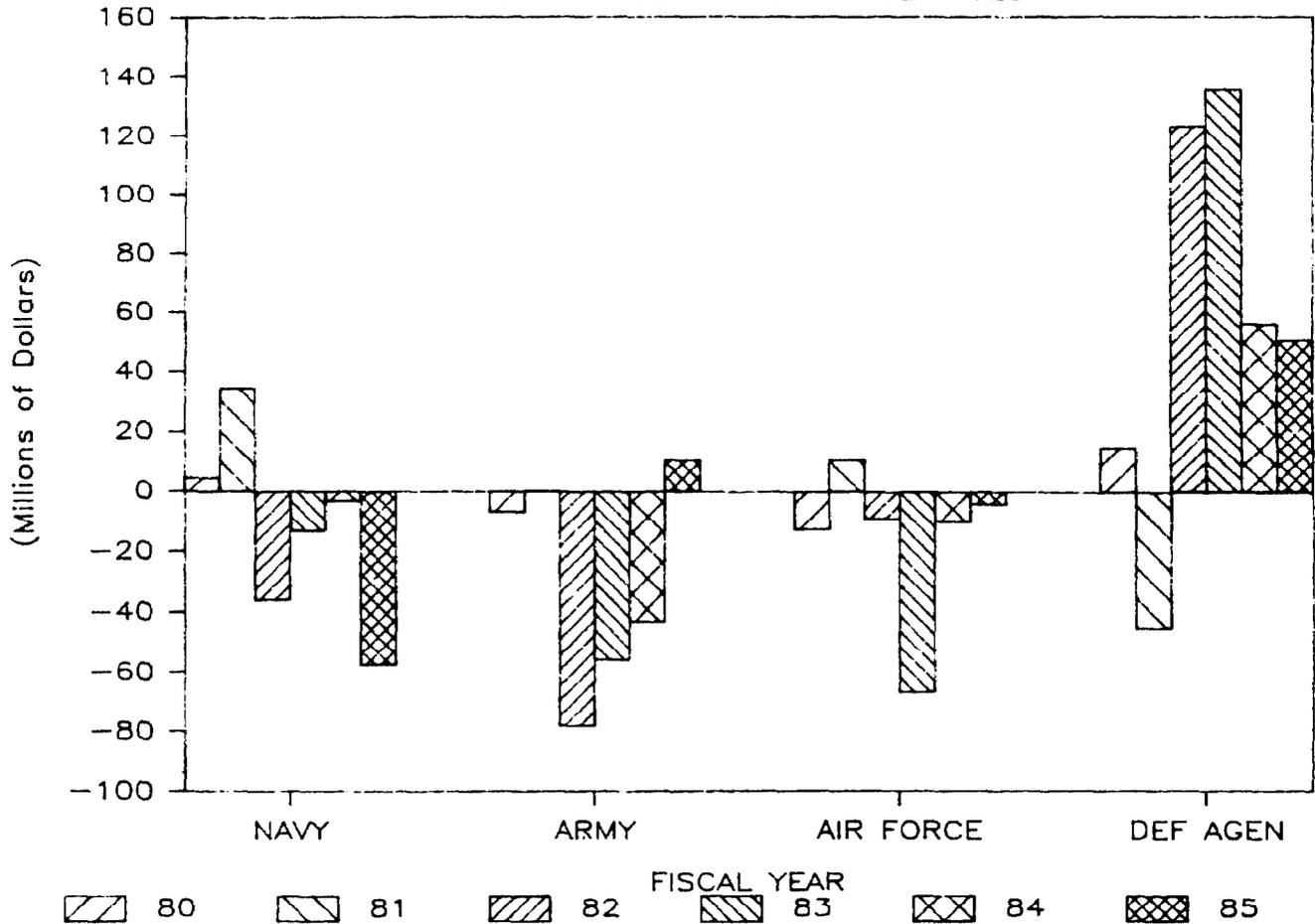
*FY 1985 data covers the 10-month period October 1984 through July 1985.

Figure 8 shows which services gained and lost funds during fiscal years 1980 through 1985. Army provided the largest amount of reprogramming funds, while Defense agencies have gained the most over the period.

FIGURE 9

REPROGRAMING GAINS & LOSSES

NET CHANGE IN MILITARY SERVICES



*FY 1985 data covers the 10-month period October 1984 through July 1985.

Figure 9 portrays Army as the major supplier of reprogramming funds, although it has been providing fewer funds since 1982 and was a gainer by a slight margin in 1985. Defense agencies have been the principal beneficiary of reprogramming actions over the last 6 years.

FIGURE 10.
REPROGRAMING GAINS IN TOP TEN APPROPRIATION ACCOUNTS
(000 OMITTED)

APPROPRIATION	FY 80	FY 81	FY 82	FY 83	FY 84	FY 85*	TOTAL
GAINS							
RDT&E, AIR FORCE	\$35,614	\$63,682	\$239,598	\$14,788	\$26,700	\$176,681	\$557,063
RDT&E, NAVY	\$27,217	\$41,297	\$27,495	\$174,480	\$99,400	\$156,084	\$525,973
MILITARY PERSONNEL, NAVY	\$50,782	\$27,200	\$75,029	\$309,300	\$0	\$41,028	\$503,339
MILITARY PERSONNEL, ARMY	\$101,270	(\$5,000)	\$47,599	\$167,600	\$0	\$76,741	\$388,210
O & M, AIR FORCE	\$16,100	\$0	\$1,400	\$142,050	\$53,200	\$47,900	\$260,650
O & M, DEFENSE AGENCIES	\$1,100	\$0	\$118,800	\$136,022	(\$18,300)	\$9,500	\$247,122
AIRCRAFT PROCUREMENT, ARMY	(\$14,570)	\$0	\$128,300	\$15,000	\$66,500	(\$11,600)	\$183,630
RDT&E, ARMY	(\$5,200)	(\$3,500)	\$10,000	\$26,300	\$57,550	\$71,100	\$156,250
RDT&E, DEFENSE AGENCIES	\$7,100	\$10,000	\$5,000	\$0	\$66,800	\$53,600	\$142,500
MILITARY PERSONNEL, AIR FORCE	\$80,919	(\$42,960)	(\$32,717)	\$117,200	(\$22,200)	\$30,469	\$130,711

*FY 1985 data covers the 10-month period October 1984 through July 1985.

Figure 10 displays the top 10 gaining accounts, which include the 4 primary RDT&E accounts (i.e., Navy, Army, Air Force, and Defense agencies). Only one procurement account (Aircraft, Procurement, Army) gained funds over the 6-year period.

FIGURE 11.
REPROGRAMING LOSSES IN TOP TEN APPROPRIATION ACCOUNTS
(000 OMITTED)

APPROPRIATION	FY 80	FY 81	FY 82	FY 83	FY 84	FY 85*	TOTAL
LOSSES							
AIRCRAFT PROCUREMENT, AIR FORCE	(\$73,263)	\$2,619	(\$166,140)	(\$163,171)	(\$56,000)	(\$164,900)	(\$620,855)
SHIPBUILDING AND CONVERSION, NAVY	(\$6,700)	(\$5,600)	\$0	(\$165,400)	(\$100,652)	(\$199,160)	(\$477,512)
MISSILE PROCUREMENT, AIR FORCE	(\$17,398)	(\$8,500)	(\$71,889)	(\$108,400)	(\$32,300)	(\$77,741)	(\$316,228)
AIRCRAFT PROCUREMENT, NAVY	(\$33,000)	\$0	(\$3,665)	(\$190,855)	(\$26,000)	(\$46,700)	(\$300,220)
PROCUREMENT OF AMMUNITION, ARMY	(\$88,917)	\$0	(\$141,900)	(\$15,500)	(\$40,200)	\$0	(\$286,517)
WEAPONS PROCUREMENT, NAVY	(\$7,600)	(\$27,897)	(\$28,130)	(\$132,400)	(\$70,453)	\$19,750	(\$246,730)
O & M, ARMY	\$36,652	(\$20,940)	(\$132,596)	(\$180,886)	\$45,620	\$17,500	(\$234,650)
PROCUREMENT OF WEAPONS AND TRACKED COMBAT VEHICLES, ARMY	(\$77,182)	(\$4,000)	\$41,600	(\$27,800)	(\$117,470)	(\$24,500)	(\$209,352)
OTHER PROCUREMENT, ARMY	(\$3,000)	\$34,440	(\$45,100)	(\$31,900)	(\$7,400)	(\$84,080)	(\$137,040)
OTHER PROCUREMENT, NAVY	(\$10,000)	(\$7,800)	(\$105,600)	(\$5,700)	\$65,100	(\$34,164)	(\$98,164)

*FY 1985 data covers the 10-month period October 1984 through July 1985.

Figure 11 displays the top 10 losing accounts, all of which are procurement accounts except for operations and maintenance, Army.

FIGURE 12.
REPROGRAMING RANK ORDER DECREASES BY CATEGORY
(000 OMITTED)

CATEGORY	FY 80	FY 81	FY 82	FY 83	FY 84	FY 85*	TOTAL
COST SAVINGS	\$272,017	\$140,157	\$288,382	\$750,386	\$806,949	\$982,334	\$3,240,225
PROGRAM RELATED PROBLEMS	\$431,803	\$140,813	\$804,461	\$718,339	\$304,873	\$511,757	\$2,912,046
CUTS FOR HIGHER PRIORITIES	\$349,573	\$459,326	\$342,370	\$799,342	\$362,805	\$348,641	\$2,662,057
REVENUE SOURCES	\$149,896	\$27,118	\$232,560	\$181,467	\$88,524	\$75,176	\$754,741
PERSONNEL EXPENSE REDUCTIONS	\$6,221	\$55,538	\$4,109	\$31,955	\$53,200	\$238,792	\$389,815
OTHER	\$8,817	\$72,700	\$59,800	\$30,500	\$28,212	\$24,200	\$224,229

*FY 1985 data covers the 10-month period October 1984 through July 1985.

Figure 12 portrays in rank order the major reasons given by DOD for funds becoming available for reprogramming. Cost savings (which includes contract savings, overestimated funds, and savings derived from management initiatives) was the leading reason why funds were available for reprogramming. Program problems (which include program cancellations and schedule slips, among others) was the second most commonly cited reason for availability of funds. The categories summarize reasons for decreases, as shown below.

Cost Savings

- Contract savings
- Competition
- Ahead of schedule
- Management initiatives
- Overestimated Funding requirements

Cuts for Higher Priorities

- Reduced requirements
- Lower priorities

Program Related Problems

- Schedule slip
- Technical problems
- Program cancellation
- Program restructure

Revenue Sources

- Favorable exchange rates
- Revenue from sales
- Expired/unobligated funds
- Lower inflation

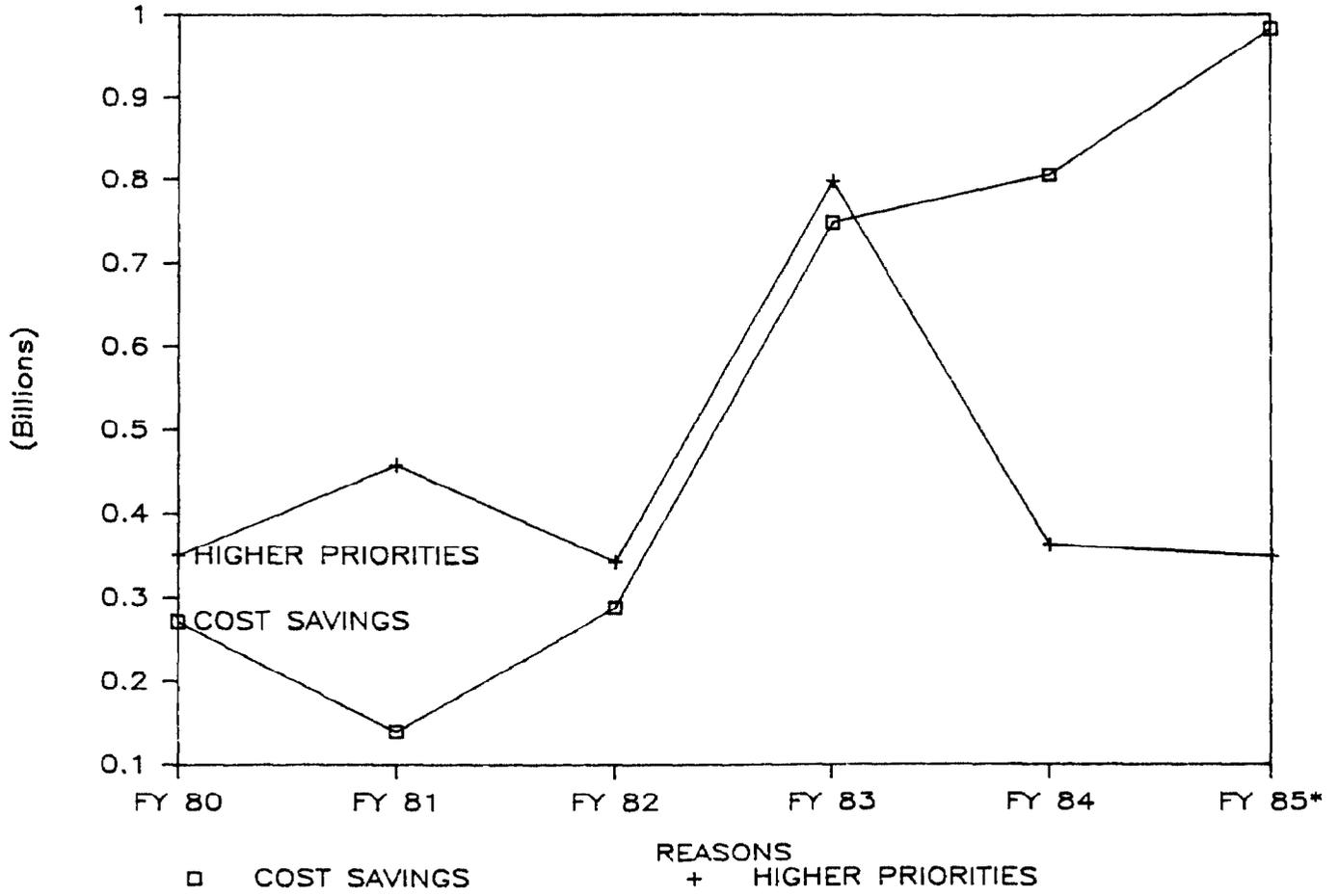
Personnel Expenses Reduction

Other

- Classified
- Unknown
- Accounting error

FIGURE 13

MAJOR REASONS FUNDS ARE AVAILABLE
FISCAL YEARS 1980 - 1985*



Contract savings
Overestimated funding
Management initiatives

Reduced requirements
Lower priority items

* FY 1985 data covers the 10-month period October 1984 through July 1985.

Figure 13 displays a change over the 6-year period in DOD's reasons why funds became available. In earlier years, reduced requirements and lower priority items were the major reasons for reprogramming funds to higher priority items. Recently, cost savings has become the leading reason why funds are available for above-threshold reprogramming; the major reason cited has been contract savings.

FIGURE 14.
REPROGRAMING RANK ORDER INCREASES BY CATEGORY
(000 OMITTED)

CATEGORY	FY 80	FY 81	FY 82	FY 83	FY 84	FY 85*	TOTAL
PROGRAM RELATED PROBLEMS	\$697,393	\$329,037	\$991,017	\$843,296	\$539,915	\$577,781	\$3,978,439
UNPLANNED REQUIREMENTS	\$282,138	\$315,262	\$357,992	\$353,130	\$724,105	\$556,369	\$2,588,996
PAY RAISE/COLA	\$30,300	\$43,160	\$45,656	\$976,838	\$25,400	\$362,659	\$1,484,013
OTHER	\$76,999	\$175,788	\$96,317	\$185,985	\$285,234	\$542,641	\$1,362,964
MANAGEMENT INITIATIVES	\$50,796	\$32,405	\$155,900	\$152,740	\$69,909	\$141,450	\$603,200
UNCONTROLLABLE EXPENSES	\$80,701	\$0	\$84,800	\$0	\$0	\$0	\$165,501

*FY 1985 data covers the 10-month period October 1984 through July 1985.

Figure 14 portrays in rank order the major reasons given by DOD for the need to reprogram funds. Program related problems, which includes cost growth, program restructures, and funding shortfalls, represents the single most important reason over the 6-year period. However, after peaking at nearly \$1 billion in fiscal year 1982, this need has steadily declined in significance. In recent years the two most significant reasons were unplanned requirements and "other." The categories summarize DOD reasons for increases, as shown below.

Program-Related Problems

- Cost growth
- Maintain schedule
- Program problems
- Program restructure
- Funding shortfalls

Unplanned Requirements

- Unforeseen military requirements
- Higher priority
- Accelerated program
- New program

Pay Raise/COLA

Other

- Classified
- Unknown
- Accounting error

Management Initiatives

- Cost Savings Alternatives
- Competition/2nd source
- Acquisition strategy change
- Negotiated unit increase
- GAO recommendation

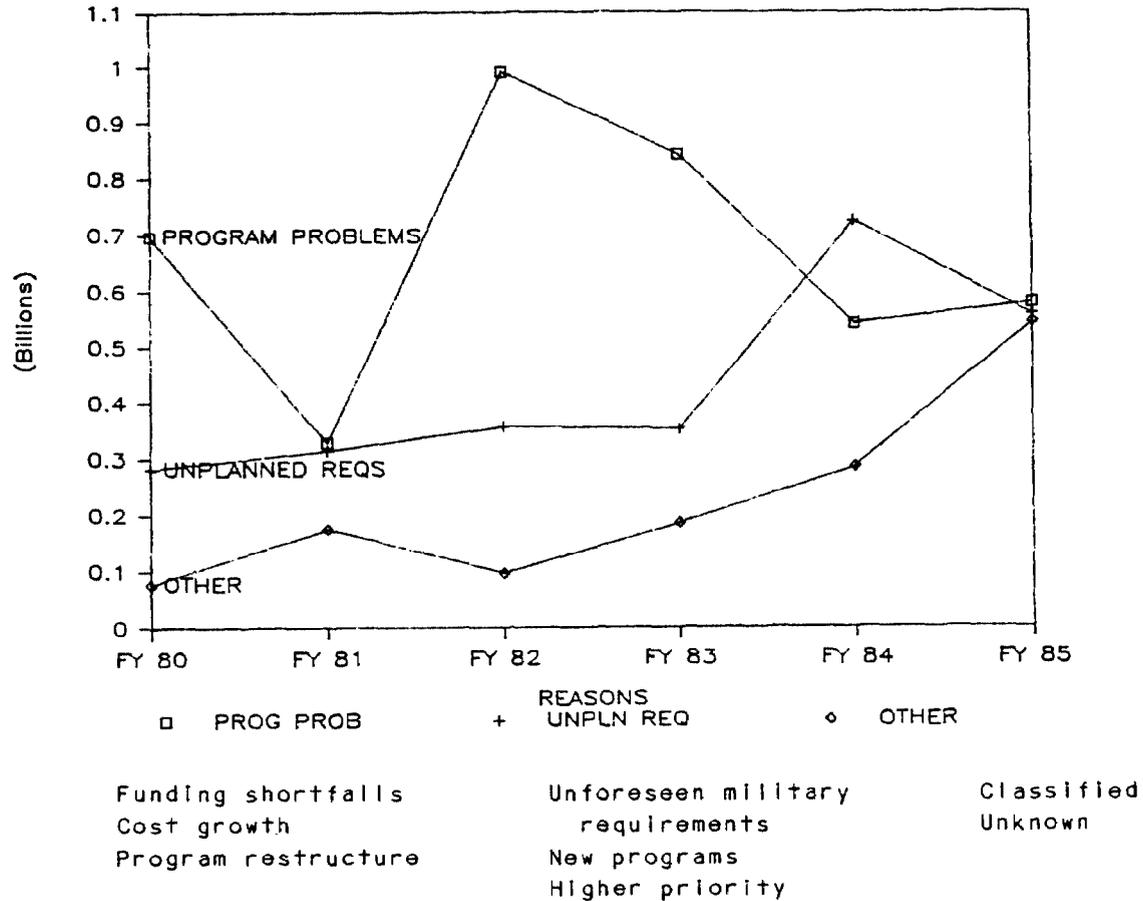
Uncontrollable Expenses

- High Inflation
- Unfavorable exchange rates

FIGURE 15

MAJOR REASONS WHY DOD NEEDS FUNDS

FISCAL YEARS 1980 - 1985*



* FY 1985 data covers the 10-month period October 1984 through July 1985.

Two major reasons why DOD needs funds are unplanned requirements and "other." Program related problems was a major reason in the past, but has been used less frequently since 1982.

FIGURE 16.
IS REINSTATEMENT REQUIRED FOR ACCOUNTS LOSING APPROPRIATED FUNDS?
(PERCENTAGE OF TOTAL REPROGRAMMED ABOVE THRESHOLD)

REINSTATEMENT	FY 80	FY 81	FY 82	FY 83	FY 84	FY 85*	TOTAL
YES	20.3%	23.7%	8.3%	8.5%	3.8%	7.3%	10.2%
NO	49.4%	43.3%	54.9%	56.9%	74.4%	84.4%	63.2%
NO DATA	30.3%	33.0%	36.8%	34.6%	21.7%	8.3%	26.6%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

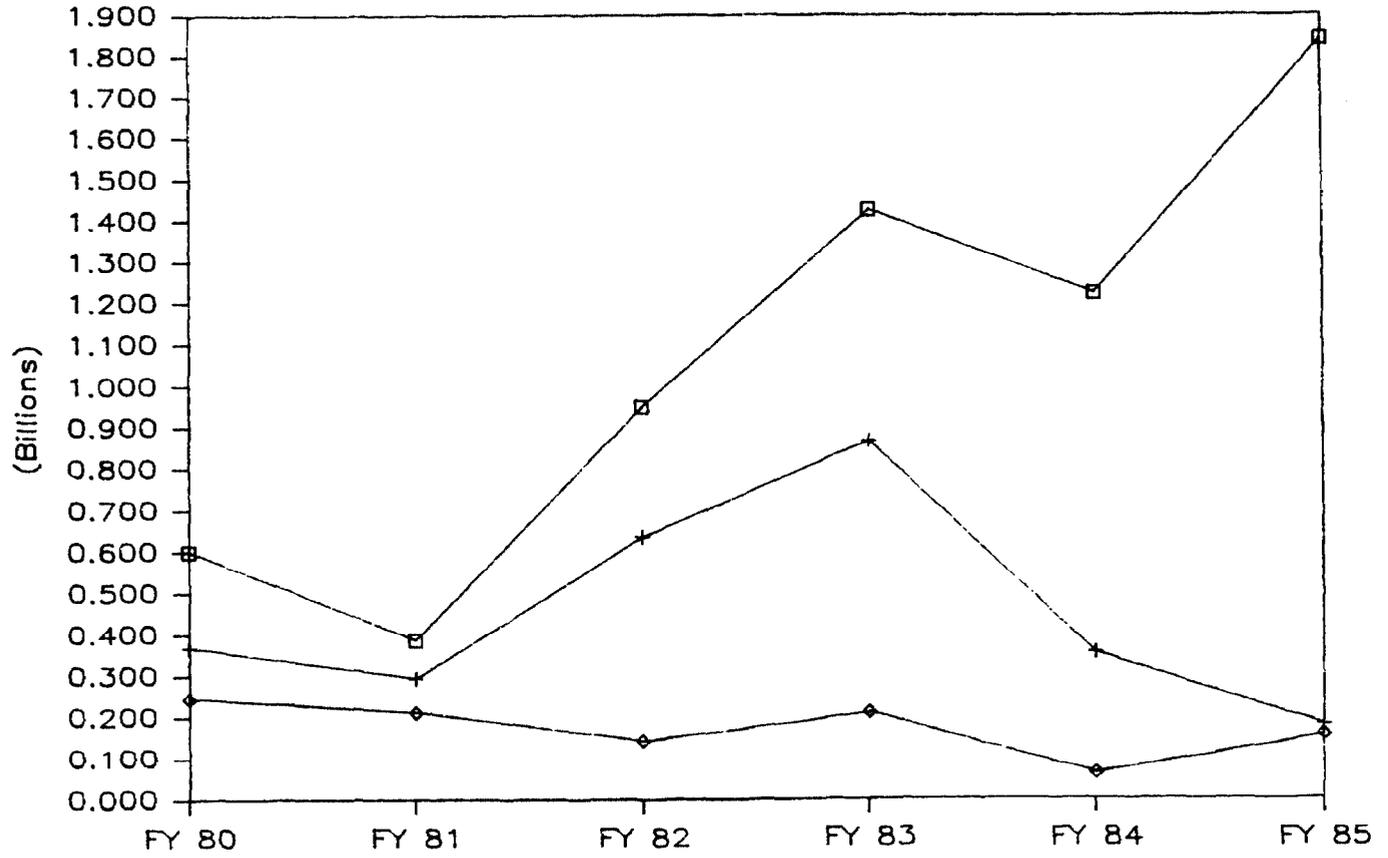
*FY 1985 data covers the 10-month period October 1984 through July 1985.

Figure 16 shows the percent of reprogrammed funds which DOD identified as needing reinstatement and the percent of funds for which DOD does not require reinstatement. Over the last 4 years, DOD has stated it needs to reinstate about 7 percent of reprogrammed funds.

FIGURE 17

DO FUNDS REQUIRE REINSTATEMENT?

FISCAL YEARS 1980 - 1985*



CATEGORIES
 □ NO + NO DATA ◇ YES

*FY 1985 data covers the 10-month period October 1984 through July 1985.

Figure 17 graphically displays the progressive increase in funds which DOD has reprogrammed to other purposes not requiring reinstatement.

FIGURE 18-1

RULES THAT APPLY TO DOD
REPROGRAMINGSAbove-threshold reprogramingsA) Actions that require prior approval from Congress:

- Any reprogramings that increase procurement quantities.
- Any reprogramings for an item that has been designated as a congressional interest item.
- Any reprogramings that make use of transfer authority, not to exceed \$1.2 billion in fiscal year 1985.

DOD uses DD Form 1415-1 to seek approval. (See fig. 19)

B) Actions that require notification to Congress:

1. Those that meet or exceed threshold amounts as follows:

- An increase of \$10 million or more in military personnel appropriations.
- An increase of \$5 million or more in the operations and maintenance appropriations.
- An increase of \$10 million or more in a procurement item or a new program of \$2 million or more.
- An increase of \$4 million or more in research, development, test, and evaluation, or the addition of a new program of \$2 million or more.

2. A new program or line item which, although initially below threshold, will result in follow-on costs that meet or exceed threshold.

DOD uses DD Form 1415-2 to notify Congress.

Figure 18-2

Below-threshold reprogramings

These actions do not require congressional approval or notification. Congress is informed of the total amount of below-threshold reprogramings on DD Form 1416, "The Report of Programs," submitted semiannually.

Internal reprogramings

Internal reprogramings are described by DOD as actions that relate to reclassification or reassignment of funds. Internal reprogramings must not

- involve a change in the substance of the program,
- deviate from the purposes originally budgeted for and approved by Congress, or
- involve any change in the amounts approved by Congress.

Internal reprogramings are not subject to thresholds. DOD uses DD Form 1415-3 to report these actions to Congress.

**FIGURE 19
Sample Reprogramming
Action Form**

UNCLASSIFIED

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Page ___ of ___ Pages

REPROGRAMMING ACTION										
APPROPRIATION ACCOUNT TITLE (includes transfers) Research, Development, Test and Evaluation, Navy, 85/86							DDO SERIAL NUMBER FY 85-6 PA			
COMMITMENT SERIAL NUMBER FY 85-5 PA		(Amounts in Thousands of Dollars)								
LINE ITEM	PROGRAM BASE REFLECTING CONGRESSIONAL ACTION		PROGRAM PREVIOUSLY APPROVED BY THE DEP		REPROGRAMMING ACTION		REVISED PROGRAM			
	QUANTITY a	AMOUNT b	QUANTITY c	AMOUNT d	QUANTITY e	AMOUNT f	QUANTITY g	AMOUNT h		
PRIOR APPROVAL ACTION										
<p>This action requests authority to transfer \$83,574 thousand to Research, Development, Test and Evaluation, Navy (RD&E,N), 85/86, from Shipbuilding and Conversion, Navy, 85/89 (\$81,074 thousand) and Missile Procurement, Air Force, 85/87 (\$2,500 thousand), in order to fund increases in classified activities. Included in this request is \$4,200 thousand in reprogramming within the RD&E,N, 5/6, account which does not require the use of transfer authority. This request is for higher priority items, based upon unforeseen military requirements than those for which funds were originally appropriated, meets all administrative and legal requirements of the Congress, and has not been denied by the Congress. It is submitted for prior approval since it involves inter-appropriation transfer authority pursuant to Section 1501 of P.L. 98-525 and Section 8025 of P.L. 98-473. This action is reflected in the FY 1985 column of the FY 1986 President's budget.</p>										
REPROGRAMMING INCREASES:										
<u>FY 1985 Program</u>										
<u>Research, Development, Test and Evaluation, Navy, 85/86</u>										
<u>Budget Activity 4: Tactical Programs</u>										
1.	63536N	Retract Juniper	-	1,373	-	1,373	-	+9,274	-	10,647
2.	63591N	Joint Advanced Systems	-	107,656	-	107,656	-	+29,400	-	137,056
3.	63737N	Link Hazel	-	43,000	-	43,000	-	+2,500	-	45,500
4.	63740N	Link Laurel	-	-	-	-	-	+30,000	-	30,000
5.	63744N	Link Spruce	-	-	-	-	-	+8,500	-	8,500
6.	63746N	Retract Maple	-	-	-	-	-	+5,600	-	5,600
7.	64302N	Link Ash	-	17,229	-	17,229	-	+2,500	-	19,729
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FIGURE 19

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Page 2 of 3 Pages

REPROGRAMMING ACTION										
APPROPRIATION ACCOUNT TITLE Research, Development, Test and Evaluation, Navy, 85/86						(Includes transfers)			DBS SERIAL NUMBER FY 85-6 PA	
COMMENT SERIAL NUMBER FY 85-5 PA			(Amounts in Thousands of Dollars)							
LINE ITEM	PROGRAM BASE REFLECTING CONGRESSIONAL ACTION		PROGRAM PREVIOUSLY APPROVED BY SEC DEF		REPROGRAMMING ACTION		REVISED PROGRAM			
	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT		
	b	c	d	e	f	g	h	i		
PRIOR APPROVAL ACTION										
Explanation: Details are not provided here due to the high classification of these programs. These may be discussed with committees as requested.										
TOTAL RDT&E,N, 85/86, REPROGRAMMING INCREASES						+87,774				
TOTAL REPROGRAMMING INCREASES						+87,774				
<u>REPROGRAMMING DECREASES:</u>										
<u>FY 1985 Program</u>										
<u>Research, Development, Test and Evaluation, Navy, 85/86</u>										
<u>Budget Activity 4: Tactical Programs</u>										
1.	63382N	BGRAWC	-	10,500	-	10,500	-	-300	-	10,200
2.	64303N	AEGIS Area Air Defense	-	14,154	-	14,154	-	-500	-	13,654
3.	64356N	Close-in Wpn Sys (PHALANX)	-	3,174	-	3,174	-	-300	-	2,874
4.	64361N	NATO SEASPARROW	-	8,398	-	8,398	-	-100	-	8,298
5.	64366N	Standard Missiles Improvement	-	41,282	-	41,282	-	-200	-	41,082
6.	64372N	New Threat Upgrade	-	48,783	-	48,783	-	-300	-	48,483
7.	64567N	Ship Subsys Devel LBT	-	91,000	-	91,000	-	-2,500	-	88,500
TOTAL RDT&E,N, 85/86, REPROGRAMMING DECREASES						-4,200				
UNCLASSIFIED										

FIGURE 19

REPROGRAMMING ACTION								
APPROPRIATION ACCOUNT TITLE (includes transfers) Research, Development, Test and Evaluation, Navy, 85/86						DDO SERIAL NUMBER FY 85-6 PA		
COMPONENT SERIAL NUMBER FY 85-5 PA		(Amount in Thousands of Dollars)						
LINE ITEM	PROGRAM SIZE REFLECTING CONGRESSIONAL ACTION		PROGRAM PREVIOUSLY APPROVED BY SEC DEF		REPROGRAMMING ACTION		REVISED PROGRAM	
	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT	QUANTITY	AMOUNT
PRIOR APPROVAL ACTION								
<u>Shipbuilding and Conversion, Navv, 85/89</u>								
<u>Budget Activity 1: Fleet Ballistic Missile Ships</u>								
1. TRIDENT (Nuclear)								
	1	1,770,600	1	1,770,600	XX	-81,000	1	1,689,600
	Less: Advance Procurement (PY)							
		XX -287,900	XX	-287,900	XX	-	XX	-287,900
	1	1,482,700	1	1,482,700	XX	-81,000	1	1,401,700
<u>Explanation:</u> These funds are available as a result of repricing due to shipbuilding reductions in man-hours required to build this ship and do not need to be reinstated.								
<u>Budget Activity 2: Other Warships</u>								
1. CG-47 AEGIS Cruiser								
	3	2,884,200	3	2,884,200	XX	-74	3	2,824,126
	Less: Advance Procurement (PY)							
		XX -1,200	XX	-1,200	-	-	XX	-1,200
	3	2,883,000	3	2,883,000	XX	-74	3	2,822,926
<u>Explanation:</u> These funds are available due to contract savings and do not need to be reinstated.								
TOTAL SO,N, 85/89, REPROGRAMMING DECREASES								-61,074
<u>Missile Procurement, Air Force, 85/87</u>								
<u>Budget Activity 5: Other Support</u>								
1. Other Programs								
		86,656		86,656		-2,500		84,156
<u>Explanation:</u> These funds are available as a result of contract savings and do not need to be reinstated.								
TOTAL MP, AF, 85/87, REPROGRAMMING DECREASE								-2,500
TOTAL REPROGRAMMING DECREASES								-67,774
APPROVED (Signature)						William H. Taft, CV Deputy Secretary of Defense		

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COMPTROLLER

ASSISTANT SECRETARY OF DEFENSE

WASHINGTON, D.C. 20301

28 AUG 1985

Honorable Charles A. Bowsher
Comptroller General
U.S. General Accounting Office
441 G Street, N.W.
Washington, D.C. 20548

Dear Mr. Bowsher:

On August 26, 1985, the Department of Defense (DoD) received the General Accounting Office (GAO) draft report entitled, "Potential For Excess Funds In DoD" (OSD Case 6826). This report was prepared in part to respond to congressional questions concerning the use of \$4 billion in prior year appropriations as a means to help fund Defense requirements in the fiscal year 1986 budget. Subsequent to this initial request, the GAO was also asked by a Member of Congress to review Defense reprogramming actions, lapsing balances, and inflation estimates as a potential source for future savings.

Because of the wide range of topics included in this report and the extremely limited four-day comment period allowed the DoD prior to publication of the final report, the Department will not be able to provide meaningful comments on the draft report. A detailed response to the final report will, however, be provided as soon as possible after it is received.

A preliminary review of the draft report indicates that it contains technical differences, which may have resulted in inappropriate GAO conclusions. If this is found to be the case, DoD comments on the subsequent final report should be brought to the attention of the GAO and the Congress before any further congressional action takes place on the Defense fiscal year 1986 budget request.

Sincerely,

A handwritten signature in black ink that reads "John R. Quetsch".

John R. Quetsch
Acting Assistant Secretary of Defense
(Comptroller)

327

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